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Mesopotamian Cosmic Geography



Wayne Horowitz

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Foreword

Mesopotamian Cosmic Geography represents the main part of my first decade of study as an assyriologist. The book began its life as a Ph.D. thesis of the same name under the supervision of Professor W. G. Lambert of the University of Birmingham. After completion of the Ph.D. thesis in 1986, I continued to collect materials relevant to the study of Mesopotamian views of cosmography with the intention of revising the thesis as a book in the early 1990s. The book Mesopotamian Cosmic Geography presents this revised, more mature examination of the topic.

Wayne Horowitz Kfar Adumim February, 1994

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First and foremost I would like to thank Professor W.G. Lambert of The University of Birmingham, Professor Lambert both supervised the original 1986 Ph.D. thesis "Mesopotamian Cosmic Geography" and then graciously reread the manuscript of the book. His wise and learned criticisms were invaluable in the preparation of the book, I would also like to thank my colleagues at The Hebrew University, Professors Aaron Shaffer and Hayim Tadmor, and my first teachers of Akkadian and Sumerian, Dr. Martha Morrison and Professors Anne Kilmer and Wolfgang Heimpel, for their support during the various stages of my career. In addition, a special word of thanks is due to Professor Tsvi Abusch, who assisted in the preparation of the original Ph.D. thesis, I would also like to thank the Trustees of The British Museum for permission to publish materials included in the book, and colleagues at The Western Asiatic Department of the British Museum, Das Vorderasiatische Museum, and The University Museum for their hospitality during study visits to London, Berlin, and Philadelphia, respectively. In addition, I would like to thank The American Friends of Hebrew University, The Lady Davis Foundation, and The Israel Academy of Sciences for their financial support during the period of the preparation of the manuscript. Finally, special thanks are due to my parents Dawn and Paul for their continued encouragement and support (financial and otherwise); my wife Lilach, for her selfless help over the past decade; Lilach's parents, Professor Chaim and Miriam Brandwein; and of course my children Lisa, Mikhael, Liam, and Gilbe for their unseen contributions to the preparation of this book.

Abbreviations and Conventions

Abbreviations, with the exception of those listed below, are as in *The Assyrian Dictionary of The Oriental Institute of The University of Chicago* (CAD), or if indicated, as in *The Sumerian Dictionary of The University Museum of The University of Pennsylvania* (PSD). In transliterations from editions of texts, the most likely reconstruction of the ancient text is provided, not necessarily that of the edition. Star-names are not translated from Sumerian to Akkadian or from Akkadian to Sumerian. Dates in the text are B.C.F. unless otherwise noted

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Archaic Bookkeeping H. Nissen, P. Demerow, and R. Englund, Archaic

Bookkeeping; trans. P. Larsen (1993)

Benito Enki C. Benito, "Enki and Ninmah" and "Enki and the

World Order" (1969)

Berlin Enm. PSD: Enmerkar and Ensuhkešdanna

Bottéro Mesopotamia J. Bottéro, Mesopotamia, Writing, Reasoning, and the Gods; trans. Z. Bahrani and M. van de Mieroop (1992)

Bottéro MrB J. Bottéro, Mythes et Rites de Babylone (1985)

Burstein Berossus S. Burstein, The Babyloniaca of Berossus = Sources

from The Ancient Near East 1/5

BWL W. G. Lambert, Babylonian Wisdom Literature (1960;

repr. 1996)

Charpin Le Clerge D. Charpin, Le Clergé d'Ur au Siècle d'Hammurabi (1986)

Cohen Balag PSD: M. E. Cohen Balag

Cohen Canonical M. Cohen, The Canonical Lamentations of

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Cohen Eršemma PSD: M. E. Cohen Eršemma

Cooper Curse of Agade
Dalley Myths
Deimel Pantheon
EAE

J. S. Cooper, The Curse of Agade (1977)
S. Dalley, Myths from Mesopotamia (1989)
A. Deimel, Pantheon Babyloniacum (1911)
The Astronomical Series Enuma Anu Enlil

Ee Enuma Elish

ELA PSD: Enmerkar and the Lord of Aratta

Fmar D. Arnaud, Emar 6: Recherches au pays d'Aštata

(1985)

EN PSD: Enki and Ninmah Enki's Journey PSD: Enki's Journey to Nippur PSD: Enki and The World Order **EWO**

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A. Grayson, Assyrian and Babylonian Chronicles =

TCS 5

George BTT A. George, Babylonian Topographical Texts (1992) George Temples A. George, House Most High: The Temples of Ancient

Mesopotamia (1993)

GHT Gilgamesh and the Huluppu-Tree (= A. Shaffer,

Sumerian Sources of Tablet XII of the Epic of

Gilgamesh (1963)

GMS 3 Grazer Morgenländische Studien 3 = Die Rolle der

> Astronomie in den Kulturen Mesopotamiens (1993) F. Stephenson and C. Walker, Halley's Comet in

History (1985)

HBA E. Weidner, Handbuch der babylonischen Astronomie (1915)

H. Hunger and D. Pingree, Mul.Apin: An Astronomical

Hunger-Pingree

Compendium in Cuneiform = AfO Beiheft 24

PSD: Inanna's Descent ID. Inanna und Enki PSD: Inanna and Enki

Jacobsen Harps as in PSD

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Lahar and Ašnan: Pettinato Menschenbild 86-90

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Explanatory Works of Assyrian and Babylonian

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Ludlul Ludlul Bel Nemegi = BWL 21-62, 343-44; R. Barnett,

AnSt 30 101-7

Machinist TN Epic P. Machinist, The Epic of Tukulti-Ninurta (1978) Malamat Mari

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MEE Materiali Epigrafici di Ebla

Naissance de l'écriture cunéiformes et hiérogluphes Naissance

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Shamash Hymn BWL 121-38

Science Awakening

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SG= Sargon Geography: Edition pp. 68-75

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AASOR 23 (1944)

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Introduction

This study collects and presents the available evidence in Sumerian and Akkadian texts for Mesopotamian ideas of the physical structure of the universe and its constituent parts (Heaven, Earth, Apsu [the subterranean waters], Underworld). All texts from all periods and genres are considered, from the earliest phases of cuneiform writing through the late period. What emerges from this study is a Mesopotamian view of the universe that is both cohesive on the one hand, and discordant and deficient on the other.

In many respects, ancient Mesopotamian understandings of the universe remained remarkably constant over the 2,500 years or so from the earliest evidence for cosmography in literary materials through the end of cuneiform writing. Throughout this time, the extant texts demonstrate that Sumerians and Akkadians understood the universe as consisting of superimposed levels separated by open space. From above to below, the levels were: a region of heaven above the sky where the gods of heaven dwelled, the starry sky, the earth's surface, the subterranean waters of the Apsu, and finally the underworld of the dead:

 A View of The Mesopotamian Universe
Heaven of Anu
 Middle Heavens
Sky
 Earth's Surface
Apsu
Underworld

This universe, according to both Sumerian and Akkadian traditions, was built by the gods in earliest times and held together by cosmic bonds. It is this conception of the physical universe that underlies, for example, carly cosmological traditions in literary works from the middle of the third millennium, the cosmography of the Babylonian national epic Enuma Elish from the late second millennium, and traditions preserved in late archives such as that of Hellenistic Uruk. Similarly, important Mesopotamian cosmographical ideas, such as the existence of an unseen region of the gods above the sky, or the tradition of the "Four Regions of the World" (an.ub.da.limmu.ba = kibrāt arba i, are present in materials before the end of the third millennium, and these traditions live onward through the end of cuneiform writing. Nonetheless, the available evidence does document change in Mesopotamian conceptions of the universe. Mesopotamian understandings of the geography of the sky evolved over time as Mesopotamian astronomy improved, and Akkadian texts from the end of the second millennium onward divide the region of heaven above the sky into two parts. Anu, the king of heaven, dwells in the higher of the two, which is often called "The Heaven of Anu."

Yet, despite the continuity of tradition between the earliest and latest documents, one does find disagreement between texts from different periods, of different genres, and even among texts from the same period and genre. For example, a number of texts seem to ignore the existence of the waters of the Apsu between the earth's surface and the underworld, and one text (KAR 307) even preserves an apparent contradiction whereby Igigi-gods are placed in a heaven belonging to Anu, the upper of three heavens in one line, and then in an intermediate level of heaven between Anu's heaven and the sky in the very next line.

Finally, the available evidence leaves a number of problems completely unsolved. For example, no surviving text presents clear evidence for the bounds of the physical universe or explains what might be found beyond the limits of the universe. Such problems are endemic to this study, since no single surviving ancient Mesopotamian source or set of sources presents a comprehensive view of the physical universe.

This investigation attempts to glean evidence from the widest possible variety of surviving sources in order to present as clear a picture as possible of Mesopotamian views of the universe. At the same time, however, it must be recognized that this approach poses certain dangers, not the least of which are our distance in time and space from the ancient writers, as well as the vagaries of archaeological discovery. For example, the most complete description of the earth's surface is found in *The Babylonian Map of the World*, which is known from but a single manuscript, and ancient Mesopotamian authors do not distinguish between cosmographic ideas drawn from direct observation of the physical world (for example, the movement of stars in the sky) and those not derived from direct observation (for example, the geography of the Heaven of Anu above the sky or the fantastic regions visited by Gilgamesh in Gilg, IX–X). The current evidence simply does not allow us to know, for instance, if ancient readers of

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Gilgamesh really believed that they too could have visited Utnapištim by sailing across the cosmic sea and "the waters of death," or if a few, many, most, or all ancient readers understood the topographical material in Gilg. IX-X in metaphysical or mystical terms. Thus, herein I do not attempt to assess the plausibility of ancient cosmographic traditions, to harmonize conflicting traditions, or to flesh out surviving materials by speculation or through comparison with materials from other cultures. Rather, as noted above, the aim of the study is to to collect and present the available evidence in Sumerian and Akkadian texts for Mesopotamian ideas of the physical structure of the universe and its constituent parts. As such, this study, despite its use of a wide variety of materials from the entire history of cuneiform civilization, is limited in scope and may be thought of as a data-base that may be used to facilitate future explorations in the field of Mesopotamian cosmography.

Mesopotamia Cosmic Geography is divided into two parts. The first part (chapters 1-9) presents studies of the main sources for Sumerian and Akkadian views of the physical universe. Included here is a study of lists of heavens and earths in KAR 307; editions of The Babylonian Map of the World and The Sargon Geography; traditions concerning voyages to heaven in the Akkadian epics Etuna, Adapa, and Nergal and Ereškigal; cosmography in Sumerian and Akkadian accounts of creation; the geography of the sky in astronomical texts; an edition of a late fragment of what may be an ancient Mesopotamian drawing of a compass-card or sundial; and finally an evaluation of a possible tradition of seven heavens and seven earths in Sumerian language incantations.

Part II presents general studies of Sumerian and Akkadian names for heaven and earth (chapters 10, 12), and examines the geographies of the two halves of the universe (chapters 11, 13). Here it is noted that the Sumerian and Akkadian lexica contain no single word that conveys our notion of cosmos or universe. Instead, general words or phrases for totality are used such as Akkadian kiššatu, kullatu, or kiššat kal gimrāti 'the entircty of all of everything' (Ee IV 14). More often both Sumerian and Akkadian materials speak of the entire universe in terms of its two constituent halves, 'Heaven and Earth'. Most common are Sumerian an.ki and the Akkadian equivalent šamû u ersetum, but other more poetic pairs are also attested including Sumerian an-uraš and gišlam, and Akkadian šamāmū u qaqqaru, and the pairs šamāmū - ešmahhu, andurunna - erșetu, elâtu - šaplātu, ašru - kigallu, ermi dani - ganzer, and burūmū-mātātu. In the studies of the geographies of heaven and earth in Part II, materials are drawn from the entire Sumero-Akkadian corpus, including texts previously examined in Part I. Thus, Part II helps place the materials presented in Part I in a broader context. The book concludes with handcopies and photographs of ancient texts, and indexes.

A list of such pairs may be found in the index sub Heaven - Earth.

Part I

Sources for Mesopotamian Cosmic Geography

The Levels of the Universe

KAB 307 30-38 and AO 8196 iv 20-22

Two short passages, KAR 307 30–38 (for a new copy, see plate 1)¹ and A0 8196 iv 20–22 (Af0 19 taf. 33), list the levels of the universe, with short descriptions of each level. KAR 307, a religious explanatory text in Neo-Assyrian script from Assur, lists three sets of heavens and three earths, while AO 8196, a late astrological-astronomical tablet, lists the three heavens but does not list the earths. AO 8196 iv 20–22 is nearly identical to the opening portions of KAR 307 30, 31, and 33. In both texts, the levels of the universe are listed in descending order beginning with the highest heavens.

KAR 307 30-38 (VAT 8917); New Copy, Plate 1

- 30. šamû" elûti (an.ta)" ^{na}-lu-lu-da-ni-tú ša ^da-nim 300(5 UŠ) ^dÍ-gì-gì ina lìb-bi ú-š[e]-^lšib¹
- 31. šamû qablûti(murub $_4$) u ua $_4$ sag-gil-mud ša df-gì-gì be-lum ina libbi paramā $_1$ i(hára.ma $_2$) ina lìb- 1 bi
- 32. i-na parakki(bára) na•uqnî(za.gìn) ú-šib Giš bu-și-(in) NA₄ el-me-ši ina libbi ú-nam-mir
- šamû¹ú¹ šaplûtu(ki.ta)^{meš} na₄aš-pu-u ša kakkabāni (meš)² lu-ma-ši ša ilāni meš ina mulılıji(ugu) e-şir
- 34. 「ina libbi¹ [dan]nat([ka]la.ga) erṣetiʿ elīti⟨an.「ta¹) zi-qi-qu amēlūti(nam.lú.ùlul) ina libbi ú-šar-bi-iṣ

² Text emended on the basis of AO 8196 iv 22.

¹ KAR 307 38 may or may not belong to the descriptions of the levels of universe (see p. 19).

- 35. [ina libbi danna]t ([kala.g]a) erşetiⁿ qab[lī]tu (mu[ru]b_{*})^m dea(Dīš) aba(ad)-šú ina libbi ú-še-šib
- 36. $\begin{bmatrix} x \times x \times \end{bmatrix} \times x \text{ si-hu ul } \acute{u}\text{-maš-ši}$
- 37. [ina libbi dannat(kala.ga) erşeti]^{ti} šaplītu(ki.ta)^{tú} nēru(geš.u)

 d^ta-nun¹-nu-¹ki ina lib-bi e-sir
- 38. | x x x x | BU MU x x | x ina] [libbi na4] aš-pu-u
- The Upper Heavens are luludānītu-stone. They belong to Anu. He settled the 300 Igigi inside.
- 31. The Middle Heavens are *saggilmud*-stone. They belong to the Igigi. Bel sat on the high dais inside,
- 32. in the lapis lazuli sanctuary. He made a lamp? of electrum shine inside.
- 33. The Lower Heavens are jasper. They belong to the stars. He drew the constellations of the gods on them.
- 34. In the ... of the Upper Earth, he lay down the spirits of mankind.
- 35. [In thc..]. of the Middle Earth, he settled Ea his father.
- 36. | ...] .. He did not let the rebellion be forgotten / identify rebellion.
- 37. |In the ... of the Lowe|r Earth, he shut inside the 600 Anunnaki.
- 38. [....]....[.in]side jasper

AO 8196 iv 20-22 (AfO 19 pl. 33)

- iv 20 [šamû^ú e]lûtu^{tu4} na4lu-lu-da-ni-tu4 šá da-nim
- iv 21 [šamû^a] qablûtu(murub₄)^{tu4} na4sag-gil-mud šá dÌ-gí-gí
- iv 22 「šamûú」 šaplûtutu пасаš-pú-u šá kakkabāni meš
- iv 20 The Upper Heavens are luludānītu-stone. They belong to Anu.
- iv 21 The Middle Heavens are saggilmud-stone. They belong to the Igigi.
- iv 22. The Lower Heavens are jasper. They belong to the stars.

The Date of the Lists

Although the tablets KAR 307 and AO 8196 both date to the first millennium, the lists of cosmic regions in KAR 307 30–38 and AO 8196 iv 20–22, in their present form, may be as old as the Kassite period. The lists as preserved cannot have been written earlier than this time, because KAR 307 places the Igigi-gods in the heavens and the Anunnaki-gods in the underworld. This divi-

The Tablets 5

sion of the Igigi and Anunnaki is not known before Kassite times.³ Nevertheless, the tradition of three heavens and earths could be older.

The Tablets

KAR 307 (VAT 8917) 4

KAR 307 is one of a small number of first-millennium mystical-religious compilations.⁵ The tablet preserves 63 lines of text divided into six sections by horizontal rulings, with three sections on the obverse and three on the reverse. The section of the tablet describing the levels of the universe (obv. 30–38) occupies the final section of the obverse. No horizontal ruling follows, so the first section of the reverse (rev. 1–10) may belong to the same section as the list of cosmic regions.

The colophon notes that KAR 307 conveys privileged information. Its first line describes the tablet as a pirišti ilāni rabûti 'secret of the Great Gods' and admonishes the reader "let the knowing reveal it only to the knowing, do not let the unknowing view it, it is a taboo (ikkibu) of the Great Gods." This secret information consists mainly of identifications and explanations. Everyday and religious articles, religious practices, parts of the universe, and astronomical phenomena are listed and their religious, mystical, or cultic significance explained. For instance, the first 18 lines of the text equate everyday items such as drums, fish, figs, and oil with parts of a divine statue or god's body; lines 19–21 identify Ištar of Nineveh as Tiamat and explain that she was the wet-nurse (mušēniqtum) of Bel; and rev. 4 states that the "disk" of the Sun is 60 leagues and that of the Moon is 40 leagues. This line is repeated verbatim in ACh Ištar 28: 42, demonstrating that KAR 307, like AO 8196, provides some astrological information.

³ For the Igigi as gods of heaven, see Oppenheim, Man and Nature 657 n. 81. For the Anunnaki as gods of the underworld, see B. Kienast in AS 16 156-58 and A. Tsukimoto, AOAT 216 184-200. The earliest known example of this distinction is found in the Sumerian myth preserved on a statue of the Kassite king Kurigalzu (see pp. 143-44). For this distinction in a Middle Babylonian kudurru, see W. Sommerfeld, UF 16 303 v 9-15.

⁴ A transliteration and translation of KAR 307 appears in SAA 3 99–102. Editions of various sections of KAR 307 also appear in A Livingstone, *Mystical and Mythological Explanatory Works.* A now outdated edition of the tablet is offered by E. Ebeling in TuL 28–37. See also W. G. Lambert, Ancient Cosmologies 58–59; F. Kraus, ZA 43 88; B. Landsberger, JCS 21 J54–155; Oppenheim Dreams 235; Oppenheim Man and Nature 640–641, 658 n. 96; Thompson DAC 75–76.

⁵ For editions of these texts see A. Livingstone, Mystical and Mythological Explanatory Works and SAA 3 81-105. A number of these texts are also discussed in W. G. Lambert, JSS 13 104-112 and Unity and Diversity 72-76, with partial editions in the footnotes of the article. For new examples of this genre, see A. George, 7A 80 157-59; A. Livingstone, NABU 1990 no. 91; G. Beckman and B. Foster, Sachs Mem. Vol. p. 4, no. 22.

 7 For $\mbox{\it HAB-}rat$ 'disk' in astronomical contexts, see ACT 197–198; AfO Beih. 22 50–51, 288.

⁶ Hunger Kolophone no. 206. For similar colophons, see also Hunger Kolophone 89, 98, 110, 533, and 562; CAD M/2 166 mudû c.

Much of the information revealed by KAR 307 relates to the battles of Marduk and Ninurta against their cnemies Tiamat, Kingu, Enmešarra, and the Anzu-bird that are known from literary texts such as Enuma Elish, The Moon-God and the Demons (= Utukku Lemnutu 16), The Judgment of Enmesarra (T. G. Pinches, PSBA 30 53-62, 77-83), The Anzu-Myth, Lugale, and Angimdimma, KAR 307 rev. 3, for instance, notes that Tiamat has four eyes and explains that her right eyes form the sources of the Tigris and her left eyes form the sources of the Euphrates. In Ee V 55, Marduk opens the sources of the two rivers in the eyes of Tiamat. Ec I 97-98 states that Marduk himself was endowed with four eyes and four ears. Likewise, KAR 307 24-27 alludes to Ninurta's victory over the Anzu-bird, which was celebrated in the various recensions of the Anzu-Myth. Often, information in KAR 307 correlates events in the aforementioned texts with ritual practice. For instance, KAR 307 rev. 20-25 apparently connects a ritual involving the king with materials similar to Angimdimma and Lugale. In the ritual, the king, who sits on a throne, is carried out of Ekur and then returned to Ekur. Cedar is then burned before him. The mystical explanation of the ceremony identifies the king as Ninurta, who avenged his fathers. In Lugale, Ninurta leaves the Ekur to fight enemies on behalf of his fathers and then returns triumphantly to Ekur. Similarly, KAR 307 rev. 19 equates the ritual throwing of a dove with the splitting of Tiamat. Thus the ritual act in KAR 307 is explained in terms of Ee IV 137-38, where Marduk splits Tiamat in half before constructing the heavens. Such passages correlating ritual practice and mythological events are typical of the genre of mystical-religious works that includes KAR 307, but it is not clear if these passages served as rough scripts for cultic reenactments of mythological events or if the association between myth and ritual occurred on a more mystical plain.

Other sections of KAR 307 present religious traditions that have not been preserved elsewhere. KAR 307 rev. 11–16, for example, identifies the ghosts of Enlil, Anu, the Daughters of Anu, and Tiamat as animals. In these lines, the ghost of Enlil is a donkey; the ghost of Anu is a wolf; the ghosts of the Daughters of Anu are gazelles; and the ghost of Tiamat is a camel with shorn horns, bound feet, and a cut-off tail. These traditions may be based on religious ceremonies where such animals were understood to represent the aforementioned gods. However, no such ritual application is obvious for the list of the levels of the universe in KAR 307 30–38. Therefore, it seems probable that this list was included in KAR 307 because of the close affinities between the list and materials in *Enuma Elish*. In both *Enuma Elish* and KAR 307 30–38, Marduk/Bel settles Ea in the Apsu, mankind on the earth's surface, and groups of gods in heaven and earth. KAR 307 33, like Ee V 1–8, states that Marduk arranged the stars in heaven.

⁸ Note, for example, KAR 307 rev. 17–18, where cattle and sheep that are slaughtered in a ritual represent Kingu and his seven sons, and Racc 26: 6, where the seven sons of Enmešarra are represented by seven heaps of flour (zidubdubbû). However, for the ghost of Anu as a wolf compare VR 46 2: mulur.bar.ra = da-nu, 'The Wolf-Star is Anu.

The Tablets 7

AO 8196 (AfO 19 pls. 31-34)

AO 8196 presents a late-Babylonian collection of astronomical, astrological, and religious information. The tablet is poorly preserved. When complete, AO 8196 presented six columns, with three columns on each side. The entire first and sixth columns, most of the second and fifth columns, and portions of columns three and four are missing. The surviving text is divided into sections by horizontal lines. Each section consists of a short list of related identifications. For instance, the section of immediate interest (iv 20–22) is comprised of three lines that name the three heavens and identify each set of heavens with a stone.

E. Weidner, in his article "Ein astrologischer Sammeltext aus der Sargonidenzeit" (AfO 19 105–113), identified AO 8196 as one of eight exemplars of a Nco-Assyrian astrological work best known from K. 250+ (CT 26 40–41).9 In the article, an attempt is made to reconstruct the original tablet utilizing materials from ΛΟ 8196, K. 250+, and the other sources. Although portions of AO 8196 do duplicate portions of these tablets, AO 8196 is not an exemplar of this astrological compendium. The list of heavens in AO 8196 iv 20–22, and six other sections occupying AO 8196 iv 28–50, are not found in any preserved exemplar of the Neo-Assyrian work. However, the exact relationship between AO 8196 and the Neo-Assyrian tablets remains uncertain since all proposed exemplars for the Neo-Assyrian astrological text are incomplete.

In addition to the section listing the three beavens, well preserved sections of AO 8196 include two lists of stars (iii 1–15; iii 16–38); a list of synonyms for sallummû 'comet' (iii 39–44); 10 sections identifying the quadrants of the Moon, months, and watches of the night with the countries of Akkad, Elam, Amurru, and Subartu (iii 45–48; iv 13–19; iv 28–30); a section identifying various parts of the month, and the sun at sunrise and sunset, with various deities (iv 23–27); a list identifying the four winds with animals (iv 38–36); the names of the two calves of Adad and two horses of the flood (iv 37–42); ¹¹ and a list of seven manifestations of the goddess Gula worshipped in different cities (iv 43–50).

Most of the information preserved on AO 8196 can be used when interpreting astronomical omens. The series *Enuma Anu Enlil* includes numcrous omens relating to the observation of comets and meteors, the lands of Akkad, Elam, Amurru, and Subartu appear frequently in the apodoses of astronomical omens, and the interpretation of astronomical phenomena is dependent on the month of the year and time of night that the phenomena are observed. Yet, no

⁹ The full tablet of K. 250+ is K. 250+7646 (CT 29 47)+11184+13677 (CT 26 50)+13709+16242 (CT 34 14). The other seven sources utilized by E. Weidner are listed in AfO 19 105-6. For a new rendering of the text, see U. Koch-Westenholz, Mesopotamian Astrology (1995) 187-205.

¹⁰ For sallummû meaning comet, see R. Chadwick, GMS 3 170-80.

¹¹ Note the parallels in Atrahasis 122 rev. 5–6 where Adad rides on "the four winds, his donkeys"; Atrahasis 94: 15–16 where the flood bellows like a bull and the winds of the flood "whinny like a wild donkey"; and Cohen Ersemma 58: 13–16 where Iskur harnesses seven storms. For parallels with *rakābu* 'to ride' in meteorological contexts, see AHw 945 *rakābu* G 9–10.

practical application for the names of the calves of Adad, horses of the flood, Gula-goddesses, or the list of the heavens is obvious.

The Levels of the Universe

The presentation of lists of cosmic regions in both KAR 307 (a mystical-religious text) and AO 8196 (an astronomical-astrological text) demonstrates that the beliefs expressed in the lists were part of both the general religious traditions of Mesopotamia and the tenets of Mesopotamian astronomy and astrology. Of course, the disciplines of astronomy and astrology were but part of the overall religious system. Major deitics such as Marduk, Anu, Enlil, and Ea were believed to have arranged the stars in heaven in early times, and gods are often identified with stars and constellations in astronomical works such as the "Astrolabes" and Mul-Apin.

The Heavens

The list of heavens in KAR 307 is drawn from two sources. The descriptions of the heavens in both KAR 307 and AO 8196 begin by identifying each heaven with a stone. These identifications can be identified as "Source A." AO 8196 preserves only material from "Source A." KAR 307 adds additional information from a second source, "Source B." This information is introduced by \$a and always includes a preterite verb. In each case, the subject of the verb apparently is Bel. The descriptions of the three earths in KAR 307 34–38 also derive from "Source B." Preterite verbs occur in these descriptions, with Bel apparently also the subject.

Although the two sources are expertly joined by §a in KAR 307, a close inspection of KAR 307 30–38 reveals that the two sources are contradictory. In the opening portions of KAR 307 30–31, "Source A" assigns the Upper Heavens to Anu and the Middle Heavens to the Igigi. "Source B" in the latter sections of line 30 and lines 32–33 disagrees. Here, the Igigi are placed in the Upper Heavens and Bel is placed in the Middle Heavens. Both sources, however, agree that the Lower Heavens belong to stars. The first part of line 33 assigns the Lower Heavens to stars, while the later half of the line states that Bel drew constellations on the Lower Heavens. This is not contradictory, because constellations are groups of stars. Below is a table identifying the denizens of the three heavens according to Sources A and B: 12

12 The division of the heavens into three zones is also attested in the second tablet of the series Bit Meseri where portions of the heavens are assigned to Anu, Enlil, and Ea:

ú-ya-diš-ku ^dlugal-gìr-ra šamê* ša-lal-ti-šú-nu šu-ut ^da-nim šu-ut ^denlil(bad) šu-ut ^dé-a G. Mejer, AfO 14 142:43–44

I have purified the three heavens for you Lugalgirra: those of Anu, those of Enlil, and those of Ea.

Heavens	Source A (KAR 807 and AO 8196)	Source B (KAR 307 only)
Upper	Anu	300 Igigi
Middle	Igigi	Bel
Lower	Stars	Constellations

The Stones of Heaven. Source A notes that the three heavens are composed of $lulud\bar{a}n\bar{\imath}tu$ -stone, saggilmud-stone, and $ia\bar{s}p\hat{u}$ -stone 'jasper'. It is inconceivable that these heavens were composed of three giant contiguous blocks of stone, because this would not allow for movement within the heavens. Therefore, it must be assumed that the floors of each level of the heavens were composed of a different type of stone, and that there was open space between each stone floor, just as there is open space between the earth's surface and the Lower Heavens. Furthermore, it may be assumed that each stone floor was visible from below and served as a roof for the region below. These assumptions find support in a parallel from Exodus, where the floor of heaven is apparently built of blue brick:

Then Moses, Aaron, Nadab, and Abihu, and the seventy elders of Israel rose up and they saw the God of Israel, and beneath his feet was the likeness of "sapphire" (Hebrew ספיר) brick just like the heavens for clarity.

Exodus 24:9-10 (cf. Ezekiel 1:26-28, 10:1)

Hebrew 'sapphire', which is equated with Greek σάπφειρος and Latin sappirus, is a blue stone and has often been identified with lapis-lazuli. Thus, the blue brick floor of heaven in Exodus, when seen from below, may be identified with the blue background color of the sky on clear days and the darker blue of the clear night sky. In KAR 307 30–31, Anu and the Igigi apparently stand on luludānttu-stone and saggilmud-stone floors of the Upper and Middle Heavens, just as the God of Israel stands on a blue 'sapphire' brick heavenly floor in Exodus.

The Upper Heavens. The highest level of the universe in both KAR 307 and AO 8196 is called the Upper Heavens. Source A assigns this level of heaven to Anu and reveals that this level is made of *luludānītu*-stone. Source B states that Bel settled 300 Igigi in the Upper Heavens.

In this passage, however, the three heavens probably refer to the astronomical paths of Anu, Enlil, and Ea in the visible heavens, rather than three superimposed levels of heaven.

¹³ Note for example the following general studies: The Interpreter's Dictionary of The Bible 4.219; Der Kleine Pauly Lexicon der Antike 4.1545; Liddell and Scott, A Greek-English Lexicon (1968) 1583; R. Forbers, Studies in Ancient Technology 7.89, and note more recently P. Kingsley, JRAS Third Series 2 (1992) 39–46. However, for an identification of the stone with modern sapphire see D. Ginzburg, Eretz-Israel 17 4', 83–85.

The assignment of the Upper Heavens to Anu in Source A identifies this heaven with the Heaven of Anu (šamû ša danim; šamû danim). The Heaven of Anu is well known in Akkadian literature and incantations. Examples of the Heaven of Anu occur in Gilgamesh, Nergal and Ereškigal, and Erra, as well as Akkadian incantations in the series Bit Meseri, Bit Rimki, and in Namburbis, 14 The identification of Anu's heaven as the highest level of heaven in KAR 307 and AO 8196 provides the most explicit evidence that the Heaven of Anu is in fact the highest level of the universe.

The reason for the identification of Anu's heaven with luladānītu-stone is unclear. In Abnu-šikinšu, a series describing the appearances of stones, 15 luludānītu-stone is said to be a reddish stone:

```
[abnu(na,) šiki]n(gar)-šú kīma nahulāli(nír)
      na<sub>1</sub>muššari (muš.gír) na<sub>1</sub>lu-lu<sub>1</sub>-da-ni-tum šum[šu] (mu.[ni])
[abnu šikin]-šú sāma(sas) pūsa(babbar) u salma(gis)
      [e-d]i-ih na<sub>4</sub>lu-lu<sub>4</sub>-da-ni-tum šumšu
```

STT 108:14-15

[The stone whose appear]ance is like hulālu-stone and muššaru-stone is named luludānītu-stone.

The stone whose appearance is red covered with white and black [patc] hes is named luludānītu-stone.

Thus KAR 307 and AO 8196 seem to imply that the surface of the Heaven of Anu was thought to be colored red, white, and black.

There is no obvious explanation for this tradition, A few passages allude to red heavens, but these passages always refer to the red color of the sky at suprise and sunset 16 rather than to a visible high heaven above the sky. Thus it seems likely that the reddish hue of the Upper Heavens is based on unknown religious or mythological considerations.17

Beilage 2-3, taf. 1-7).

¹⁴ For examples of the Heaven of Anu, see pp. 244-46.

¹⁵ For the scries Abnu-šikinšu, see W. Horowitz, ZA 82 112-22.

Note SAA 8 266 rev. 4, 309:1; van Soldt Solar Omens 46:5-47:7; M. Leibovici, RA 50 18: 28-38; Nabnitu XX 44 (MSL XVI 181); and a number of passages where the Heavens are said to 'be beaten red' sāmta maḥis at sunrisc (see CAD S 124 sāmtu B). This expression apparently refers to blood-red heavens, since the same expression is used for bloody fingers in Labut TDP 98: 58-59. For blood in the sky in mythological contexts, see Lugale 178; CT 13 34 rev. 7'-9' (The Labbu-Myth); and a similar allusion in Ee IV 32. Sec also CAD S 382 sāmu b), AfO Beih. 22 55-57, and S. Langdon, Babyl. 7 234-35. For a parallel expression urga mahis to turn yellow/green, see W. von Soden, ZA 71 110: 3.

¹⁷ For instance, red, white, and black *luludānītu*-stone may be identified with the Heaven of Anu because Anu himself is identified with the colors red, white, and black. In Summa-Alu (CT 40 49: 29-30), a red bird with a white patch on his head is identified as the "bird of Anu," and red, white, and black patterns of decorative cones were found in the archaeological remains of Anu's city, Uruk (see for example Bagd. Mitt. Beih. 1

The tradition of 300 Igigi in the Upper Heavens in Section B agrees with the apocryphal line of *Enuma Elish*, Ee VI 69:

300 để-gì-
ì šá šá-ma-[m]i u 600 šá apsî kalī (dù)-šú-nu paḥ-ru
 The 300 Igigi of heaven and 600 of the Apsu, all of them, were gathered.

In Ee VI 37-44, Marduk places 300 Anunnaki, rather than Igigi, in heaven.

The Middle Heavens. Source A assigns the Middle Heavens to the Igigi and notes that these heavens are made of *saggilmud*-stone. Source B explains that Bel's cella is located in the Middle Heavens.

The identification of the Middle Heavens with saggilmud-stone is appropriate, since saggilmud-stone is a blue stone. The blue color of saggilmud-stone can be established on the basis of information in Uruanna, Urgud, and Abnušikinšu. In Uruanna (MSL X 70: 30) and Urgud (MSL X 33: 113), saggilmudstone is identified as hašmānu-stone. The color of saggilmud/hašmānu-stone can be established on the basis of hašmānu-colored wool. In an economic tablet from Ugarit, hašmānu-colored wool is said to be a shade of lapis-lazuli colored wool:

```
2 túgkitû gad[a<sup>mcs</sup> 2 me-a|t <sup>siki</sup>uqnî (za.g`in)

2 me-at <sup>siki na</sup>ihaš-ma-ni a-na [...]

2 túgkitû <sup>mes</sup> [2] [me-a|t <sup>siki</sup>uqnî <sup>mes</sup> 2 me-at

<sup>siki</sup>uqnî haš-ma-ni a-na mār [...]

1 tígkitû me-at <sup>sikil</sup>uqnî 1 me-at <sup>sikil</sup>uqnî-haš-ma-ni

a-na <sup>lû</sup>tup-pa-nu-[ru]

RS 11.732 B 3-5 (MRS 6 181, Syria 21 258)
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2 garments (made of [20]0 (shekels) of blue wool (and)
200 of "hušmānu"-wool for [...]
2 garments (made of) 2[00] (shekels) of blue wool (and)
200 of blue-"hašmānu" wool for the "son" [...]
1 garment (made of) 100 (shekels) of blue wool (and)
100 of blue-"hašmānu" wool for the tuppanū[ru-official]
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The description of saggilmud-stone in Abnu-šikinšu, although partially damaged, confirms that saggilmud-stone is the same color as lapis-lazuli:

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abnu šikin-šú kīma [n4] [ú-qu]-ni n4:sag-[gil]-mud šum[šu]
STT 108:88
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The stone whose appearance is like lapis-lazuli is named saggilmud-stone

The blue lapis-like color of the Middle Heavens may be compared with the blue brick roof of the sky in Exodus 24:10. Therefore, KAR 307 and AO 8196 suggest that the bottom surface of the Middle Heavens was visible from the earth's surface.

The Cella of Bel in the Middle Heavens. ¹⁸ In KAR 307 31–32, Tradition B describes a heavenly cella of Bel in the Middle Heavens. Two elements of the cella appear in the text: bára = parakku and bára.mah = paramāhu. It is difficult to distinguish between these two terms, since KAR 307 31–32 provides the only contextual example of parakku and paramāhu together, and chairs can be placed on both. Urra 5, for example, lists chairs of both the parakku and paramāhu: ¹⁹

```
[Eisgu.za.bára = MIN (kussî)] pa-rak-ki
(chair of the parakku)

[Eisgu.za.bára.m]ah = [MIN] pal-ra!-ma-hu!
(chair of the paramāhu)

Urra 5 87-87a (see MSL V 157, 1X 170)
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The translation of *parakku* as 'sanctuary' is based on *Malku* and *Explicit Malku*, which list *parakku* as a synonymn for a number of words meaning 'shrine, sanctuary, etc.' (A. Kilmer, JAOS 83 429: 274–75, 443: 152–55).

The second part of the description of Bel's cella, as written, states that Bel made a GIŠ bu- $\dot{s}i$ N_{A_4} el-me- $\dot{s}i$ shine inside the cella. This phrase is problematic. As preserved GIŠ bu- $\dot{s}i$ N_{A_4} el-me- $\dot{s}i$ can refer to three objects, two objects, or a single object. For instance, there may be three separate wood (GIŠ), glass ($b\bar{u}\dot{s}u$), and stone (ma -elme $\dot{s}u$) furnishings in the cella of Bel; a ^{gi}bu - $\dot{s}i$ that is made of wood and glass, plus a stone object; or a single wooden object inlaid with glass and elme $\dot{s}u$ -stone. Two suggested emendations solve some but not all of these difficulties. CAD B 349 $b\bar{u}\dot{s}u$ A 3' deletes GIŠ, and translates:

He (Marduk) made it shine within with būṣu-glass and crystal (elmešu-stone).

This translation, however, does not explain the form or function of the glass and *elmešu*-stone. CAD E 107 (sub *elmešu* a) offers a better solution. Here, the editors of CAD emend to read <code>pibu-ṣi-(in)</code> and then translate 'lamp (made of) *elmešu*-stone', explaining that Marduk lit a lamp (*buṣinnu*) of *elmešu*-stone in the cella.²⁰ A parallel can then be found in an Esarhaddon oracle where lštar lights a light of *elmešu*-stone in a heavenly cella:²¹

18 For cellas and daises in Heaven, see pp. 250-52.

¹⁹ PSD B does not separate bára from bára.mah. Sumerian bára.mah is translated into Akkadian in bilingual texts by the both the loanword paramāḥu and as parakku ṣīru 'majestic dais' (see PSD B 142 3-5). The loanword paramāḥu is chosen in KAR 307 31 so that the word parakku is not repeated in both KAR 307 31 and 32. However, a rendering parakku ṣīru remains possible. See PSD B 135-36 1.4 for examples of pagu.za.bára and grans.mah in Sumerian texts.

²⁰ B. Landsberger (JCS 21 154) also emends bu-şi-(in) and translates 'Lampe'. A. Oppenheim (Oppenheim Glass 16; Oppenheim Man and Nature 641) omits GIS and translates 'būṣu-glass'. A. Livingstone (SAA 3 100) translates 'has made a lamp of electrum shine there'.

²¹ Note the Hebrew parallel in Ezek 1:26-27 and an Akkadian parallel in KAR 98 rev. 8-9: u-ki-in ina gaqqadi ka-ka-a[b-t]am el-me-ši nam-r[i] T placed on the head a star of shining elme-šu-stone. For possible Sumerian parallels, see M. Stol, Natural Phenomena 255, 269 n. 90.

^{pš}kussâ-ka ina šapal(ki.ta) šamê° ra-bu-te uk-ti-in ina ma-si-ki ša hurāşi ina qereb šamê° a-ḥa-ri-di nu-ur ša el-me-ši ina pāni mdaššuràha-iddina šar, kuraššuri ú-šá-na-ma-ra

4B² 61 iii 29-35

I have established your throne below the great heavens. From the golden cella in the midst of heaven I will keep watch over you. I will make a light of *elmešu*-stone shine before Esarhaddon, the King of Assyria.

However, one might object that *buşinnu* normally means 'lamp-wick', while the lamp itself is a *bīt buşinni* 'house of the wick' (see CAD B 348). Nonetheless, a copper *buşinnu* 'lamp' is found in ADD 964 rev. 15 without *bītu*. ²²

Another reference to the Middle Heavens (šamê qablûti) is to be found in the mystical explanatory work OECT 11 69+70 i 35-37 (OECT 11 p. 28) in the context of a celebration of an Akitu festival of Ninurta on the 24th of Ivar:

den-líl ih-du-šum-ma [†]bu¹-su-rat šul-mi a-na dlugal-du₆-kù-ga a-na šamê* qab-lu-(ti) iš-pur OECT 11 p. 28, nos. 69+70: 33'-34'

Enlil rejoiced over him (Ninurta) and sent a message of well-being for Lugaldukuga to the Middle Heavens.

The appearance of Lugalkuduga in the Middle Heavens in this passage is puzzling. Elsewhere, Lugalkuduga is either an ancestor of Enlil who dwells in the underworld, or a name for Ea who is normally to be found in the Apsu (see W. G. Lambert, RIA 7 133–34). If Lugalkuduga in this context is the underworld god, then one might find a parallel in Adapa, where the underworld gods Tammuz and Cizzida stand at the Gate of Anu at the entrance to heaven (p. 65). If Lugalkuduga is Ea, then one might note the events in $Nergal\ and\ Ereškigal$, where Ea is to be found in the heavens along with Anu and Enlil (p. 66).

The Lower Heavens. Sources A and B agree that the Lower Heavens were composed of jasper and that these heavens belong to stars. Source A assigns the jasper heavens to the stars in general, while Source B is more specific, explaining that Marduk drew the <code>lumāšu</code> 'constellations' on the jasper heavens.

Jasper is a type of chalcedony, a hard, glassy, often translucent stone. Many ancient varieties of translucent chalcedony were called jasper ($\tan \pi g = iaspis$) in the classical world, although modern jasper is generally opaque. Pliny, in his Natural History (Book 37 37), states that jasper (iaspis) is often translucent and refers to many varieties of "jasper," including a hard, dull, grayishgreen jasper from Cyprus, a sky blue "aerizusa" jasper from Persia, and rose-colored, violet, yellow, and purple varieties of jasper. The sky-blue "aerizusa" jasper from Persia is appropriate for the jasper of the Lower Heavens in KAR

²² Note also a bit gisbu-si-ni in BAM 304: 20'.

²⁵ See G. F. Herbert Smith, Gemstones (1940) 348-49.

307 and AO 8196, since the Greeks thought this variety of jasper resembled the appearance of the sky in Autumn:

The fourth variety (of jasper) is known among (the Greeks) as "boria" or "northwind" jasper, because it is like the sky on an autumn morning. This will be identified with the kind that is called "aerizusa."

Pliny Natural History 37 37 (Loeb Classical Library 10 258-59)

Descriptions of two varieties of jasper in Abnu-šikinšu explain why the Lower Heavens are identified with jasper in Mesopotamia:

abnu šikin-šú kīma šamê° za-ku-ti na4aš-pu-u šumšu abnu šikin-šú kīma urpat(dungu) rilişi(gìri.bal) [na4a]š-pu-u šumšu BAM 378 iv 19-22//STT 108: 76-77 24

The stone whose appearance is like the clear heavens is named jasper. The stone whose appearance is like a rain cloud is named [j]asper.

Another reference to jasper of the heavens is found in CT 51 89 iii 13:

```
...] na<sub>4</sub>aš-pú-u šá kīma <sup>[</sup>šamê<sup>e]</sup> [...
...| jasper which like heaven [...
```

The series Abnu-šikinšu describes a gray jasper that has the appearance of the overcast sky and a variety of jasper that has the appearance of the clear sky. The first variety may be compared with the grayish-green jasper of Cyprus, while the second is probably to be identified with sky-blue jasper of Persia or yellow jasper. On clear sunny days, the blue sky often appears to be tinged yellow by the sun. Both varieties of jasper in Abnu-šikinšu are appropriate stones for the Lower Heavens. On cloudy days, the lowest portion of heaven appears to be colored gray by clouds, while on sunny days, the lowest portion of heaven seems to be the clear, open sky.

In his Natural History (37 37 115), Pliny states that ancient jasper (iaspis) was often translucent. This would explain how the blue saggilmud-stone floor of the Middle Heavens could be seen from the earth's surface through the 'jasper' floor of the Lower Heavens. There is no evidence that saggilmud-stone is translucent, so the blue saggilmud-stone floor of the Middle Heavens apparently kept humans from seeing into the homes of Anu, the Igigi, and Bel in the Middle Heavens and Highest Heavens, above the saggilmud-stone. It is not clear, however, how the jasper of the Lower Heavens might have been thought to change from clear to cloudy.

The terminology of KAR 307 33 suggests that the stars and constellations were thought to be etched directly onto the jasper surface of the Lower Heavens. The text explains that the stars are drawn *ina muḥḥi* the Lowest Heavens. This prepositional phrase is apparently contrasted with *ina libbi*, which occurs seven times in KAR 307 30–38. The Igigi, "spirits of mankind," Ea, and the

²⁴ STT 108: 76, 「za!」 šu-ti may be read za-qat-ti or be an error for za-ku-ti (the difference between KU () and ŠU () is but a single stroke.

Anunnaki all dwell *ina libbi* their regions. Thus *ina libbi* here must mean 'on (and above) the surface of the region', because mankind lives on and above the surface of the earth. In contrast, *ina multhi* occurs just one time in KAR 307 33 and implies that the stars were drawn directly onto the stone surface of the Lower Heavens. In a parallel on a late Lamaštu tablet, *ina multhi* and *eṣēru* are used when a lunar crescent and solar disk are etched onto a clay tablet:

```
dù.dù.bi tuppa(dub) tašaṭṭar(sar)ʿar uskara(u₄·sakar) šamšata(aš.me) [kakkaba gamla]
ina muḥ-ḥi te-eṣ-ṣir . . .
LKU 88 rev. 18—19 + duplicates (see CAD Š/1 388 c)

It's ritual, you inscribe a tablet. A crescent moon, solar-disk, [star, and hooked-staff]
on it you draw . . .
```

Further evidence for stars and constellations inscribed onto the sky is found in other Akkadian texts. In a literary passage from *Enuma Anu Enlil*, Anu, Enlil, and Ea draw constellations in the sky (E. Weidner, AfO 17 89:4–5). In *The Labbu Myth*, Enlil draws a 50-league-long constellation in the heavens:

```
den-líl ina šamê de i-te-şer [ . . . . ]

50 bēru mu-rak-šu 1 bēr[u ru-pu-us-su]

CT 13 33:7-8

Enlil, in the heavens, drew [ . . . . . ]

50 leagues was its length, 1 leagu|e was its width.
```

Another text explains how to draw various constellations, including $^{\rm mul}$ šu.gi 'Perseus', $^{\rm mul}$ al.lu $_5$ 'Cancer' and $^{\rm mul}$ mar.gíd.da 'Ursa Major' (E. Weidner, AfO 4 74–75). Surviving sketches of constellations are found on the Neo-Assyrian planisphere CT 33 10, and drawings of stars and constellations, including $^{\rm mul}$ ur.gu.la 'Leo' and the seven stars of mul.mul 'Pleiades', are found in E. Weidner Gestirn-Darstellungen pls. 1–2, 5–6, and 9–10. 25

A tradition that the fixed-stars were inscribed onto the surface of the heavens implies that this surface rotated every 24 hours, since inscribed stars could not move independently. This tradition is reasonable since stars and constellations maintain fixed positions relative to one another as if inscribed on a rotating sphere. The Sun, Moon, and planets do not maintain fixed positions in relation to the stars, leading later Greek, Hebrew, and Arabic astronomers to speculate that these heavenly bodies were located on different levels or spheres from the fixed stars.

²⁵ For CT 33 10 (K. 8538), see now J. Koch, *Neue Untersuchungen zur Topographie des babylonischen Fixsternhimmels*. Note also the terms *šiţir burūmē* ('writing of the night-sky') and *šiţir šamê* ('writing of heaven'), which refer to the arrangement of the stars in the sky; the drawing of *miṣrātu* 'boundary lines' in the sky in Ee V 3; the stars drawn on circular 'Astrolabes' (CT 33 11); and the Old Akkadian exercise tablet AfO 25 104.

The Earths

KAR 307 34-38 lists and identifics three earths. The Upper Earth is inhabited by the "spirits of mankind," the Middle Earth by Ea, and the Lower Earth by 600 Anunnaki. These inhabitants live in/on the dannatu of these earths. It is almost certain that the dannatu of these earths are the surfaces of each earth, although dannatu has a wide range of meanings including 'hard ground', 'fortress', 'hard times', 'bottom of a foundation pit', and even a part of the lungs (see CAD D 87). The only direct evidence connecting dannatu with the earth is found in Malku I 51 where dannatu is listed as a synonym for annatu (A. Kilmer, JAOS 83 425). In the commentary to the Babulonian Theodicy (BWL 74: 58), ammatiš is explained as kīma ersetu ('like earth'), so dannutu can be a name for 'earth' as a whole. Indirect evidence for dannatu as the surfaces of the earths is found in the equivalence between dannatu and Sumerian KI.KAL, literally 'hard earth'. If this sense of dannatu is intended, then the dannatu of the three earths could correspond to the stone floors of the three heavens. The dannatu of the Apsu, in this case, would be the 'ocean floor' of the Apsu, rather than the top surface of the Apsu.

The Upper Earth. The Upper Earth should logically be the earth's surface, because the earth's surface lies directly beneath the heavens. Yet, KAR 307 34 places the ziqīqu of mankind on this earth, and ziqīqu normally are ghosts of the dead (see CAD Z 58–59). Dead human beings reside in the underworld rather than on the earth's surface. A parallel from the series Bit Rimki helps solve this paradox:

dutu mas.sù.maḥ di.ku₅ an.ki.da.me.en d8ama8 mas-sù-ú ṣi-r[u]? dajān(di.ku₅) šamê° u erṣetim^{tim} at-ta₅

nì šà.ta ì.gá.gá inim šu [xxxx] ^ral^{?1} DI DU₁₁
mim-ma šá ina lìb-bi ba-áš-šu-ú ^ral[?]-|mat[?] x x i]q-qab-bu-u

sìg.sìg.ga nigin nam.lú.ùlu^{lu}.ke₄ šu.min ma.ra.ni.íb.gi₄.gi₄ zi-qí-qa šá nap-har ni-ši ú-šá-an-na-ka

lú nì.érim e.gír bí.íb.šub.bu.dè rag-ga ár-hiš tu-šam-qa-at

lú nì.zi nì.si.sá bar.ta bí.íb.ag.en kit-ta u me-šá-ra te-be-er R. Borger, JCS 21 3: 11-15 (Oppenheim Dreams 235)

Sun-god, you are the august leader, the judge of heaven and earth. Whatever is inside, the word? w[hich..., so i]t is said, the spirits of all men repeat to you. You strike the evil-man quickly. You choose truth and righteousness.

In Bit Rimki, there is no suggestion that the ziqiqū ša naphar nišī 'spirits of all men' are located anywhere but the surface of the earth. Thus, the ziqiqī amēlūti 'spirits of mankind' in KAR 307 34 must be the embodied spirits of living humans on the earth's surface.

A parallel may be found in the Kassite period Sumerian literary work *The Duties and Powers of the Gods* that is inscribed on fragments of a statue of Kurigalzu:

a.n[e].er ki.a šu.nígin a.za.lu.lu al.nú.nú Sumer 4 pl. 4 vi 1'-6'

For him, they lay down all of mankind on earth.

In this passage, unnamed gods settle a.za.lu.lu on ki. Here, ki must be the earth's surface, because the underworld is identified as kur in this text (see p. 144). Sumerian nú parallels $rab\bar{a}su$ in KAR 307 34, and a.za.lu.lu is equivalent to both $am\bar{e}l\bar{u}tu$ 'mankind' and $namma\bar{s}tu$ 'herd-animals'. ²⁶

The Middle Earth. The Middle Earth belongs to Ea. This earth must be the Apsu since the Apsu is the cosmic region of Enki/Ea. In Ee IV 145–46, Ea occupies the Apsu when Anu and Enlil take possesion of the heavens (šamāmū) and Ešarra.

KAR 307 36 is obscure. The verb in the line, umašši, may be understood as a preterite of mussû/muššû 'to identify' or a II/1 preterite of mašû 'to forget'. 27 In the latter case, a parallel might be found in LKA 73:5:

... si[?]]-ḫi ul a-maš-ši LKA 73 rev. 5 (SAA 3 104)

... rebelllion? I will not forget

The verb mussû/muššû 'to identify' does not occur in the I/1 stem.

It is not certain, however, how a rebellion in KAR 307 36 could be connected with Bel, Ea, and the Apsu, because no account of a rebellion by Ea against Marduk is known. In a parallel to KAR 307 36 in a mystical-religious text, Marduk sends Ea down to the Apsu without any reference to a rebellion:

... de-a ša ina tu-li-šu de-li i-dar-su-ma a-na apsî ú-še-rid-[su] Livingstone 116:2 (SAA 3 96: 8-9)

... Ea, whom Bel pushed away from his bosom and sent down to the Apsu.

The term *ersetu qablītu* 'Middle Earth' also occurs a number of times in BE 39099, a late-Babylonian account of the flood (Lambert-Millard Atra-ḥasis

²⁶ For nú = rabīṣu, see AHw 933. For a.za.lu.lu = both amēlūtu 'mankind' and nammaštu 'herd animals', see CAD A/2 58, N/1 234.

²⁷ For examples of mussû/muššû 'to identify' written with variants s and š, see Shamash Hymn 127 (BWL 134) and Erra V 10 (Cagni Erra 122-23).

116-21). In this text, the Middle Earth is not necessarily the Apsu. BE 39099 explains that Sin and Nergal were assigned to guard the Middle Earth before the flood at a time when Anu and Adad guarded the heavens, and Ea guarded the sigaru naþbalu tāmti 'bolt, "Net of the Sea". If the Middle Earth in BE 39099 is the Apsu, Ea may have been removed from his region because he could not be trusted to implement the commands of Enlil. In both Atrahasis and the flood story of Gilg. XI, Ea saves the human race by revealing the secret of the flood.

The Lowest Earth

The bottom level of the universe in KAR 307 is the Lowest Earth. This earth is the underworld. KAR 307 37 notes that Bel shut 600 Anunnaki in the underworld.

The information in KAR 307 37 is consistent with much of our knowledge of the underworld. As noted earlier, the Anunnaki, from the Kassite period onward, are almost always underworld gods, and a few texts confirm that the Anunnaki of the underworld numbered 600. For instance, a hymn to Nergal praises the king of the underworld as the āšir dannina sāniq nēr 'Controller of the underworld, Supervisor of the 600' (Bollenrucher Nergal 8:4),²⁵ while a late bilingual passage refers to the 600 Anunnaki of 'earth':

da.nun.na ki.a mu.uš.u.bi da-nun-na-ki šá erṣetim^{tım} ne-e-er-šú SBH 139:157-58

The Anunnaki of the earth, the 600 of them.

It is also implied elsewhere that the Anunnaki are locked in the underworld, although no text other than KAR 307 explicitly states this fact. In An Address of Marduk to the Demons, the Anunnaki are located within the gates of the underworld (AfO 19 117 24–30). Furthermore, the underworld name erset la târi 'Earth of No Return' indicates that Anunnaki could not have reasonably hoped to escape from the realm of the dead. Only privileged officers of the underworld, such as Kaka, the vizier of Ereškigal in Nergal and Ereškigal, ever left the gates of the underworld, but even Kaka was expected to return. An exception is Inanna/Ištar in Inanna's Descent and The Descent of Ištar, but she must provide a substitute to take her place in the underworld.

The tradition that Marduk, or any god, locked the Anunnaki in the underworld is not found in surviving Mesopotamian texts, but a parallel may be found in the Theogony of Hesiod. In the Theogony, Zeus jails his defeated enemies in Tartarus after putting down their rebellion against his rule (Hesiod Theogony 713–35).

 $^{^{28}}$ For the name of the Anunnaki written $^{4}600(\text{GE}\&\textsc{t}),$ note also Borger Esarh. 79: 9, 96: 8; SAA 3 8: 26, 30; 9: 8 (= Craig ABRT 29–31); 72: 12 (Underworld Vision); Livingstone 32: 4.

It is certain that *Enuma Elish* is not the source of KAR 307 37. *Enuma Elish* does not even mention the underworld, and Ee VI 39-44 places 300 Anunnaki in carth, rather than 600 Anunnaki, as in KAR 307.

The final line preserved on the obverse, KAR 307 38, refers in some way to jasper, but it is unlikely that this line continues the description of the underworld, because line 37 ends with a preterite verb. Preterite verbs mark the end of the descriptions of each of the five previous cosmic regions in KAR 307 30–37.

"The Babylonian Map of the World"

The Late Babylonian tablet BM 92687 preserves a unique Babylonian bird's-eye view of the earth's surface. The sketch, commonly called "The Babylonian Map of the World" or "Mappa Mundi," occupies the upper half of the obverse, while the remainder of the obverse and entire reverse preserve related textual information. The text was first published more than a century ago by F. E. Peiser (ZA 4 |1889] 361–70) and then recopied by R. C. Thompson in 1906 as CT 22 48. This second copy served as the basis for later studies by E. Weidner (BoSt 6 [1922] 85–93) and E. Unger (in Unger Babylon 254–58 [1931]). Then, in 1988, I published a new edition and copy of BM 92687 in Iraq 50 (1988) 147–65. More recently, I. Finkel identified and joined a tiny ("square inch or so of backed clay"), but important, fragment to the map on the obverse.¹ A revised copy and photographs of BM 92687 are found below (see pp. 402–3, 405–6).²

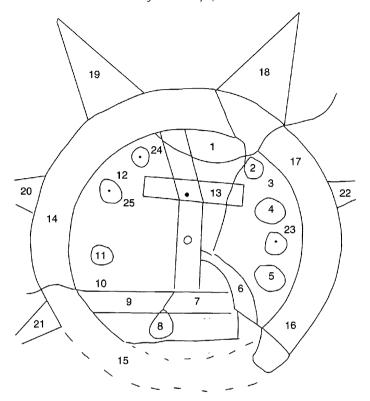
The Captions

 ša-du-¹ú¹ 	Mountain
2. uru	city
3. \dot{u} -ra- \dot{a} \dot{s} -tu[m]	Urartu

This chapter appeared in an earlier form as an article entitled "The Babylonian Map of the World," Iraq 50 147–65.

¹ This discovery is reported by I. Finkel in British Museum Magazine 23 (1995) in the News & Events section. The author thanks Dr. Finkel for his cooperation in the study of the new fragment.

² The earliest photo of the tablet known to me is in C. Ball, Light from The East (1899), 23. However, note that a third nagû (no. 21) has now fallen off (compare the photo in Ball with pl. 6, p. 406 here). For other photos of the obverse only and further bibliography, see Iraq 50 147 n. 2; SAA 8 94; A. Millard in J. B. Harley and D. Woodward, eds., The History of Carlography I, 111–14. Note also W. Heimpel, ZA 77 68; J. Glassner, Akkadika 40 20; Naissance 257; M. Stohl, Pheonix 34 29–35; W. Horowitz, VTSup 41 35–43.



4. ^{kur} aš+šur ^{ki}	Assyria
5. dér(BAD.AN) ^{k1}	Der
6. x-ra-[
7. ap-pa-r[u[swamp
8. $[\check{s}]u\check{s}a[n]([\mathbf{M}]\check{\mathbf{U}}\check{\mathbf{S}},[\mathbf{EREN}^{Ik}])$	Susa
9. bit-qu	channel
10. bit-ia-³-ki-nu	Bit Yakin
H. uru	city
12. ḫa-ab-ban	Habban

13. TIN.TIR ^{ki}	Babylon
14. idmar-ra-tum	ocean
15. [(id)mar-ra-tum]	[ocean]
16. $[(id)m]ar-ra-tum$	[o]cean
17. $mar-r[a-tum]$	oce[an]
18. BAD.GULA 161 bēru ina bi-rit a-šar dšamaš la innammaru (nu.igi.lá)	Great Wall 6 leagues in between where the Sun is not seen
19. na-gu*-ú* 6 bēru ina bi-rit	Region 6 leagues in between
20. $[na-gu]^{-1}\hat{u}^{1}$ $[(\dots)]$	[Regio]n [()
21. [na]-gu-ú [()	$ [Re]gion \\ [(\dots)]$
22. na-gu-ú 「8」 bēru ina bi-rit	Region 8 leagues in between
00 05 37 7	

23–25. No Inscription

The Text on the Obverse

- 1'.] x x x x [......
- 2'.....] x $\bar{a}l\bar{a}nu^{\text{mes}}$ ab-t[u-tu.....
- 3'. [... tam-tum rapaštum^{tı}]^m šá i-bar-ru-ú ^d marduk ti-tú-¹ri qé-r|eb-ša]
- 4'. [... b|i u ilānu $^{mc\bar{s}}$ ab-tu-t|u] šá ina lìb-hi tam-tim ú-še-[ši-bu]
- 5′. [...x]-x-[[]šu¹ iz-za-zu ba-aš-mu mušhuššu rabû(muš.huš gal) ina libbi an-zu-ú girt|ablullû|(gír.t[ab.lú.ùlu^{lu}]³
- 6'. [x x a]r-mu șa-bi-tum ap-sa-su-ú [n]im-ru ki-sa-r[i-ku]
- 7'. [$x \times n$] \bar{e} δu (ur.maḥ) barbaru(ur.bar.ra) $lul\bar{l}mu$ (lu.lim) u bu-u-[su]
- 8'. $[pa\hbox{-}gu]^{{\rm I}}\acute{u}^{{\rm I}}$ pa-gi-tum turāhu(dàra) lu-ur-mu šu-ra-nu hur-ba-bi-li
- 9'. | x x x] û-ma-mu šá ina muhhi tam-tim gal-l[a-t]im dmarduk ib-nu-šu-n[u-ti]

^{*}Signs visible on early photographs

 $^{^{5}}$ The reading <code>girtablullû</code> for <code>gir.tab.lú.ùlulu</code> is suggested by the loanword <code>bullû</code> from Sumerian lú.ùlu (see CAD L 242). There are no phonetic writings of the word, to confirm this reading, or <code>girtablilu</code> as proposed in AHw 291.

The Text 23

- 10'. [xxm]^{rd1}ut-napištim(zi)^{tim} šarru-kin u nūr(zalag)-d[d]a-gan šàr bur-^ršaun^r-ḥa¹-a[n-da]
- 11'. [x x k]a-ap-pi işşuri \S (mu \S en) 1i§ -ma man-ma qé-reb- \S i-na ul $^{1}i^{1}$ -[du-u]

Translation

- 2'.] . the rui[ned] cities [. |
- 3'. [... the vas]t [Sea] which Marduk sees. The bridge in[side her?]
- 4'. [...] and the ruine[d] gods which he set[tled] inside the Sea
- 5'. [....] .. are present; the viper, great sea-serpent inside. The Anzu-bird, and scorpi[on-man]
- 6'. [.. moun]tain goat, gazelle, zebu, [p]anther, bull-m[an]
- 7'. [...l]ion, wolf, red-deer, and hye[na],
- 8'. [monk]ey, female-monkey,4 ibex, ostrich, cat, chameleon,
- 9'. [...] beasts which Marduk created on top of the res[tl]ess Sea,
- 10'. [.. U]tnapištim, Sargon, and Nur-[D]agan the King of Buršaḫa[nda],
- 11'. [..w]ings like a bird, which/whom no one can com[prehend.]

The Text on the Reverse

- 1'.] x [.....
- 2'..... $lab^{?}$ |-ra?-[ti?....
- 3'..... tam-t] u_{\perp} $ra-bi-t\acute{u}$ [.....
- 4'. [maḥ-ru? na-gu-ú? ina e-re-b]i-šú tal-l[a-ku 7 bēru ...
- 5'. [a-na šan \hat{u}^i na-gu- $\hat{u}]$ $[a^1$ -šar tal-la-ku 7 $b\bar{e}[ru \dots$
- 6'. [....] x x x šap-[liš/lat ...
- 7'. [a-na šalšu]¹⁸⁶¹ na-gu!(text DU)-ú a-šar tal-la-ku 7 bēr[u ...
- 8'. [iṣ-ṣu]-ru mut-tap-ri-ši la ú-šal-l[a-am uruḫ-šu]
- 9'. |a-na re|-bi-i na-gu-ú a-šar tal-la-ku 7 bē|ru ...
- 10'. [$x \times x$]-du ik-bi-ru ma-la par-sik-tum 20 uhān[u]($\S u.s[i]$) [...

 $^{^4}$ For $pag\hat{u}$ and pagitu as male and female monkeys, see Urra 14 118–19: ugu. dul.bi = $pa\text{-}gu\text{-}\acute{u},$ munusugu.dul.bi = pa-gi-ti (MSL 8/2 16).

11'. [a-na ḥanš]u ^[šu] na-gu-ú a-šar tal- [[] la ¹ -ku 7 bēru [
12'. [xx] mi-lu-šú 1 UŠtaàm şu-up-pan x [
13'. [xxx] x zi-nu-šú a-na aš-la tahm [
14'. [xx]-x-mi da-mi-šu ul im-mar [
15'. [$x \times x$] ni-il-lu aš-ri tal-la-[ku
16'. [x x x x ta/]-al-la-ku ^[7] b[ēru
17'. $[x \times x \times x \times]$. A a - $\hat{s}i^{-1}i$ $\hat{s}\hat{a}$? ina^p $\hat{s}u^{p_1}$ - $[\dots]$
18'. [xxxx]-šú i-bi-ri [
19'. [a-na šeššu ^{šú}] na-gu-ú a-šar tal-la-ku [7 bēru
20′. [x x x x inaʔ] muḥḥi a-na-ku кім/рі́м-т[и
21'. [a-na sebî] ^[i] na-gu-ú a-šar tul-la-ku [7 bēru
22'. šá alpu(gu,) qar-nu šak-nu [
23'. i-la ¹ -as-su-mu-ma i-kaš-šá-du- ^r ú ¹ [
24'. a-na [šam]anî¹ na-gu-ú a-šar tal-ku-ku 7 bēr[u
25'. [x x x x] a-šar ti-še- ⁻ -ru ina ḫa-an-du-ri-šú 「ú/šam¹-[x-x]
26'. [xxxxx-t]i šá kih-ra-a-ti er-bet-ti šá kal x []
27'. [x x x x x] x : qé-reb-ši-na man-ma la ^[i] -[du-ú]
28'. [x x x x x] x ki-ma la-bi-ri-i-šu šu-ţi-ir-ma ba-r[i]
29'. [x x x x x] $m\bar{a}r$ -šú šá "iṣ-ṣ u - ru ¹ [$m\bar{a}$] r "dea(idim)- $b\bar{e}l$ (en)- il [i "es]
Translation
1'] x [
2' wo]nde[rs?
3'] great s[ca?
4'. [The first? region?, when one ent]ers it you tra[vel leagues
5'. To the second region] where you travel 7 lea[gues
6'. [] be[low
7'. [To the thir]d region, where you travel 7 leagu[cs
8'. A winged [bi]rd cannot safely comp[lete its journey]

The Text 25

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9'. To the folurth region, where you travel 7 leagues ...
10'. [...] are thick as a parsiktum-measure/vessel, 20 finger(s) [...
11'. [To the fif]th region, where you travel 7 leagues [...
12'. [.. is] its height/flood; 840 cubits is its . [...<sup>5</sup>
13'. [...] its frond/rain; as much as 120 cubits<sup>6</sup> is [its...
14'. [...] its blood he does not see! ...
15'. [... which we climb?, where you trave[] ...
16'. [..... you/| I will travel 7 lesagues ...
17'. [......]. the departure which? is in . [...
18'. [....] its [...] he crossed | ...
19'. [To the sixth] region, where you travel [7 leagues ...
20'. [.... on? | top, I... [...
21'. To the seven th region, where you travel 7 leagues ...
22'. where cattle equipped with horns | ...
23'. they run fast and reach [...
24'. To the [ei]ghth region, where you travel 7 leagu[es...
25'. [.... the p]lace where ... dawns at its entrance.
26'. [....]. of the Four Quadrants of the entire. [...]
27'. [....] .: which no one can compre[hend]
28'. [....]. copied from its old exemplar and colla[ted]
29'. [....] the son of Issuru [the descend]ant of Ea-bēl-il|i|
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The Date and Composition of the Text

The map, at least, can be no older than the ninth century. The author of the map calls the ocean *marratu* (salt-sea) and includes the sites of Bit Yakin (no. 10) and Urartu (no. 3). The earliest example of *marratu* occurs in an inscription of Shalmaneser III (858–824) that identifies the name as a loanword from a Chaldean dialect into Akkadian:

 6 1 $a \pm lu = 120$ cubits (see RIA 7 459).

 $^{^5}$ l Uš (720 cubits) + 2
 $\sup pu$ (120 cubits) (see RlA 7 459 Table II). As written,
 $\sup p\bar{a}n$ is dual.

ka-šid ultu tam-di rabîti n ša mat a-mur-ri ša šul-me dšam-ši a-di tam-di ša mat kal-di šu dmar-ra-tam i-qa-bu-ši-ni

KAH 100 3-6 (E. Michel, WO 1 387; cf. WO 1 466:51)

Conqueror from the Great Sea of the Land of Amurru of the setting of the Sun to the Sea of the Land of Chaldea which they call the marratu.

Likewise, Bit Yakin also occurs for the first time during the ninth century (see Brinkman PKB 169, 199), and Urartu occurs regularly in Neo-Assyrian inscriptions beginning at this time, although an earlier form Uruatri occurs in Middle Assyrian inscriptions (see RGTC 5 274–75). It is likely, however, that the map dates to the late eighth or seventh century. In the Shalmaneser III inscription, the Persian Gulf is called marratu, while the Mediterranean is called tâmdu rabîtu. The World Map identifies the entire world ocean as marratu. The earliest evidence that the Mediterranean was called marratu is found in an inscription of Sargon II (721–705) where the king rules the *marrati elîti and 'dmarrati šaplīti' Upper and Lower Ocean' (R. C. Thompson, Iraq 7 112 fig. 1:12).

It is not certain if the text on the obverse and reverse was composed together with the map. The text on the reverse was probably written to accompany the map, because both include $nag\hat{u}$, but the text on the obverse was probably composed separately and joined to the map by a later editor. This text calls the ocean $t\hat{u}mtu$, instead of marratu, and does not mention any of the places drawn on the map.

The map was composed in Babylonia rather than Assyria. Babylon is represented by a large rectangle encompassing almost half the width of the central continent, while Assyria is represented as a small oval.

The provenance of the Late Babylonian copy BM 92687 itself is uncertain. Most of the 82-7-14 collection (BM 92687 = 82-7-14, 509) is from Sippar (see Leichty Cat. 6 xxxiii), but it is possible that the tablet comes from Borsippa. The tablet preserving the map (82-7-14, 509) is assigned an out-of-sequence BM number (see Leichty Cat. 6 198), suggesting that the tablet may not be from Sippar, and the colophon of the tablet identifies the scribe who prepared BM 92687 as a descendant of Ea-bel-ili. In an economic document, a scribe of the same name is identified as being from Borsippa:

[™]itti-^anabu-balāṭu mār-šú šá [™]la-a-ba-ši mār ^{™d}ea-bēl-ilī ^{™es} bar-sipa^{ki} TuM II/III 220:12–13

Itti-Nabû-balāţu, the son of Labaši, the descendant of Ea-bēl-ilī of Borsippa

The Map

The map as preserved depicts the earth's surface as two concentric circles, with triangular areas radiating from the outer circle. The area within the inner

The Map 27

circle represents the central continental portion of the earth's surface, where important sites such as Babylon and Assyria are located. The area between the two circles is identified as the *marratu* 'ocean'. On the map, this cosmic ocean circumambulates the central continent. The area beyond the outer circle consists of the triangular areas, which are identified as $nug\hat{u}$ 'regions', and unchartered space.

The drawing is unique among ancient Mesopotamian maps. Numerous maps or plans of cities and rural areas, such as the map of Nippur (S. N. Kramer, FTS 274),7 are known, but only the World Map is drawn on an international scalc. Nevertheless, the World Map utilizes standard Mesopotamian cartographic conventions. Both the World Map and small-scale maps use geometric shapes to represent topographic features. For instance, the placement of the marratu 'occan' within two concentric circles is comparable to the practice of drawing rivers and canals within parallel lines representing their banks. One small map fragment (RA 4, plates following p. 84 no. 72) even preserves a circular segment of a river or canal that is similar in shape to the cosmic occan on the World Map.8 Similarly, the oval shape of the region marked 'mountain' (no. 1) may be compared with semicircular hills drawn on the Old Akkadian map from Nuzi (HSS 10 1). Nonetheless, the World Map differs from other cuneiform maps and plans in other respects. On other cunciform maps, rivers, fields, buildings, and other features are drawn to scale, and the relative positions of features seem reasonable. In contrast, the relative size and location of many of the features on the World Map seem preposterous. For instance, the circle representing the city of Der (no. 5) is as large as the circle representing Assyria.

The Continent

The continent on the World Map contains various geometric shapes representing places and topographic features. The place-names include the countries of Assyria (no. 4) and Urartu (no. 3); the cities of Babylon (no. 13) and Der (no. 5); and Bit Yakin (no. 10) and Habban (no. 12). Topographic features include $\check{s}ad\hat{u}$ 'mountain' (no. 1), apparu 'swamp' (no. 7), and bitqu 'channel' (no. 9). The oval labeled Susa (no. 8) is placed within the circle representing the continent but is located across the 'swamp' and 'channel' from Babylonia.

The parallel lines that begin in the region marked 'mountain' and end in the rectangle marked 'channel' and 'swamp' provide the means for interpreting the map. On cuneiform maps and plans, parallel lines represent river banks. On

⁵ For drawings of rivers and canals, note, for example, the Map of Nippur (FTS 274); Naissance 243; CT 22 49; HSS 10 no. 1 (cf. AOS 74 81-82); KAV 25; and JNES 21 80.

⁷ The map of Nippur is also published in C. S. Fisher, Excavations at Nippur, pl. 1. For other maps and plans see Iraq 50 154 n. 5, RlA 6 464-67, A. Millard in J. B. Harley and D. Woodward, eds., *The History of Cartography I*, 107-14; Naissance 243; George 28, 133; Archaic Bookkeeping 64-69.

the World Map, the parallel lines are not identified, but the course of the lines indicates that they represent the banks of the Euphrates. Near the middle of the map, the two parallel lines bisect the rectangle labeled 'Babylon.' In the first millennium, the Euphrates flowed through the center of Babylon. Herodotus (Book 1 180) states: "there are two sections of the city [Babylon] for a river flows through the middle. It's name is the Euphrates." Nebuchadnezzar speaks of building projects on both sides of the river (VAB 4 130:7—132:30), and the excavations of Babylon by Koldewey found architectural remains on both sides of the ancient course of the river (see R. Koldewey, Excavations at Babylon, 16).

When the parallel lines are identified as the Euphrates, the locations of many of the other features on the map become clear. The 'mountain' at the source of the river represents the mountains of southern Turkey where Shalmaneser III visited the sources of the Tigris and the Euphrates:

ina 15 palė(bala)^{meš}-ia ina reš e-ni šá ^{id}idiglat(ḫal.ḫal) ^{id}puratti(a.rat) a-lik ṣa-lam šárru-ti-ia ina ka-pí-ši-na ul-ziz Layard ICC 92:92–93 (E. Michel, WO 2 152)

In the 15th year of my reign, I went by the headwater(s) of the Tigris and Euphrates. My royal relief I erected on their cliffs.

On the bronze gates of Balawat, this expedition to the sources of the rivers is drawn in mountains (L. W. King, *Bronze Reliefs*, pl. 109).

The rectangle at the mouth of the river marked apparu 'swamp' and bitqu 'channel' represents the swamps along the lower Euphrates and a waterway connecting the mouth of the Euphrates with the Persian Gulf. The modern Euphrates does not issue directly into the Persian Gulf but joins with the Tigris to form the Shatt-Al-Arab, a channel connecting the rivers to the Gulf. The left edge of the rectangle on the World Map, next to the label bitqu, touches the shore of the narratu, so the bitqu is probably an ancient equivalent of the Shatt-Al-Arab. In a letter, this ancient bitqu is located near Bit Yakin, just as Bit Yakin is drawn along the shore of the bitqu on the map:

^{lú}šākin ṭēmi(GARKU) ù e-muq šá bit-™ia-a-ki-nu it-ti-šú-nu a-di muḥḥi bit-qa ki-i il-li-ku-ni ABL 542:12−13

The governor and forces of Bit-Yakin went with them as far as the bitqu.

It is likely that the *bitqu* was a shipping channel that enabled ships to bypass the marshes of southern Babylonia on their way to the open sea, because the *bitqu* on the map connects the mouth of the Euphrates with the ocean and leads away from the area marked 'swamp'.

The bend of the Euphrates by the rectangle marked 'Babylon' apparently represents the shift in the course of the river from southeast to a more southerly direction, near Babylon, rather than the great bend of the Euphrates upstream.

In contrast to the relatively accurate depiction of the course of the Euphrates, the map omits the Tigris altogether. The Tigris should rise in the

oval marked 'mountain', pass through Assyria and to the right of the rectangle labeled 'Babylon', before emptying into the rectangle marked 'channel' and 'swamp'. The ancient course of the Tigris passed approximately 80 km. northeast of Babylon in the first millennium (see RGTC 8, maps). Thus, it is not possible that the two parallel lines represent both the Euphrates and the Tigris.

The locations of other features are also problematic. Assyria and Urartu are correctly placed east of the Euphrates, with Urartu north of Assyria, but Assyria is located too far south in relation to Babylon. Bit Yakin, the southernmost entity in Babylonia during the first millennium, is correctly positioned near the mouth of the Euphrates, but is moved from the east side of the river to the west. Susa is correctly positioned below the outlet of the Euphrates, but should be located to the right of Babylon, rather than directly below the city. Habban (no. 12) is located west of the Euphrates, although the land and city Habban of the Kassite tribe Bit Habban were located east of the Tigris.

Other features on the map cannot be identified. The crescent-shaped area extending from the east bank of the Euphrates to the marratu (no. 6) may represent an arm of the ocean separating southern Babylonia from Elam, since the traces inside the the figure can be restored [ma]r-ra-[tum]. This crescent, however, might also be an arm of the Euphrates ([p]u-ra-[tu]), a canal, or even a road ([ha]r-ra-[nu]) leading from the river to the coast. Of course, the two circles identified uru (city) and the three circles containing only compass points cannot be identified. The reason that these sites are not labeled is unclear, but it is likely that their names were damaged on an earlier copy of the map. However, it is also possible that these sites may be ancient ruins whose names were no longer remembered, such as the 'ruined cities' in obv. 2.

The marratu 'Ocean'

The circular band enclosing the continent is identified four times on the map as the marratu 'ocean' (nos. 14–17). The term marratu is a first-millennium synonym of lâmtu 'sea'. For instance, Sargon II of Assyria states that the gods entrusted him with leadership of the peoples ištu idmarrati elîti adi idmarrati šuplīti 'from the Upper Ocean to the Lower Ocean' (R. C. Thompson, Iraq 7 112 fig. 1:12), just as Sargon of Akkad is given the tiamtam alîtam u šapiltam 'Upper and Lower Sea' by Enlil in a third-millennium inscription (H. H. Hirsch, AfO 20 48:9–13, Gelb-Kienast 182).

The term *marratu*, unlike *tâmtu*, is often written with the fD determinative used for rivers and canals. This suggests that the *marratu* was thought to be a relatively narrow body of water rather than a boundless sea. On the map, the *marratu* is bounded on both sides by circles and, as drawn, is not much wider

⁹ See RGTC 8 145.

¹⁰ RIA 8 229 suggests 'Horn of the Sea' (i.e., [qa]-ra-[an tâmti]) and a relationship between this term and the Sumerian equivalent si a.ab.ba in the writing of the Sumerian name of Borsippa (bàd.si.a.ab.ba^{la}). The reference to A. L. Oppenheim, Dict. of Scientific Biography (= Oppenheim Man and Nature) in RIA 8 229 should be to p. 655 n. 31.

than the Euphrates. This mistake in scale almost certainly reflects the crudity of the map rather than a belief that the world ocean was almost as narrow as a major river. Similarly, the fact that the lines marking the banks of the Euphrates touch the inner shore of the *marratu* need not necessarily mean that Mesopotamians thought that the Euphrates began at the cosmic sea.

The nagû

The five triangular areas (nos. 18–22) radiating from the outer circle are identified as $nag\hat{u}$. When complete, the map may have included as many as eight such $nag\hat{u}$. The text on the reverse describes eight $nag\hat{u}$, and there is room for additional missing $nag\hat{u}$ along the broken bottom edge of the map where Peiser drew two $nag\hat{u}$ in ZA 4 369. Nevertheless, it is not possible to correlate the surviving $nag\hat{u}$ on the map with those described on the reverse, and it cannot even be certain that the $nag\hat{u}$ described on the reverse are identical to those drawn on the map. On the reverse, the $nag\hat{u}$ are said to be seven leagues ina birit in between, but the $nag\hat{u}$ on the map itself are not equidistant from each other. The $nag\hat{u}$ on the map, however, are all equidistant from the coast of the continent so "seven leagues" may measure the distance across the marratu to the $nag\hat{u}$, rather than the space between $nag\hat{u}$.

The Term nagû in Assyrian and Babylonian Texts. In the first millennium, the geographic term $nag\hat{u}$ is common in Neo-Assyrian royal inscriptions, but rare in Late Babylonian royal inscriptions and literary texts. In Neo-Assyrian royal inscriptions, $nag\hat{u}$ is generally used with a political nuance to refer to administrative districts or provinces. For example, Sargon II states that he conquered 430 cities belonging to seven $nag\hat{u}$ 'districts' (TCL 3 66:422), and Senacherib conquers the $nag\hat{u}$ 'province' of Judah (OIP 2 86:15). This Assyrian meaning of $nag\hat{u}$ is not appropriate for the World Map because there is no evidence that any Mesopotamian king conquered any of the $nag\hat{u}$ nor are the $nag\hat{u}$ across the marratu divided into political units. In Late Babylonian royal inscriptions, the term $nag\hat{u}$ is used for distant unspecified areas. This sense of the word is appropriate for the World Map.

The term $nag\hat{u}$ survives five times in published Late Babylonian royal inscriptions: four times in the inscriptions of Nebuchadnezzar and once in those of Nabonidus. In three of the Nebuchadnezzar examples, the $nag\hat{u}$ are located ina qereb $t\hat{a}mti$ 'in the sea', suggesting that these $nag\hat{u}$ are islands. 12

 $^{^{11}}$ For other examples of $nag\hat{u}$ in Neo-Assyrian inscriptions, see CAD N/1 121–22 $nag\hat{u}$ A 1. For a possible Old Babylonian example of $nag\hat{u}$, see A. Grayson and F. Sollberger, RA 70 115 L II 12'.

¹² Oppenheim (Man and Nature 655 n. 36) connects this sense of *nagū* with an Aramaic cognate *nagūū*n. For an equation between the *nagū* on the World Map with "the isles of nations" in Genesis 10:5, see W. Horowitz, VTSup 41 35–43. MSL 17 60 n. 74 no longer identifies ½ū and *nagū* as near synonyms in *Erimbūš* as in CAD I/J 317 ½ū. H. and J. Lewy (HUCA 17 12–13) argued that the *nagū* on the World Map are mountains rising

The clearest example is found in a description of the empire that Marduk granted to Nebuchadnezzar:

ku-ul-la-at ma-^I ti¹-ta-an gi-mi-ir ku-la da-ad-mi ul-tu ti-a-am-tim e-litim a-di ti-a-am-tim ša-ap-li-tim mātāti (ma.da.ma.da) ru-qá-a-tim ni-ši da-ad-mi ra-ap-ša-a-tim šarrāni ^{meš} ša-di-i ne-su-tim ù na-gi-i bé-e-ru-tim ša qé-re-eh ti-a-am-tim e-li-tim ù ša-ap-li-tim ša ^dmarduk be-lí a-na ša-da-ad si-ir-di-šu ší-ra-at-si-na ú-ma-al-lu-ù qá-tu-ú-a

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BE 1/1 85 ii 13-29 (VAB 4 146 ii 17-33) (cf. VAB 4 146 iii 2-148 iii 7; 206:17)
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All the lands, the entire inhabited world from the Upper Sea to the Lower Sea, distant lands, the people of vast territories, kings of far away mountains and remote $nag\hat{u}$ in the Upper and Lower Sea, whose lead-rope Marduk, my lord, placed in my hand in order to pull his yoke.

In the remaining Nebuchadnezzar inscription (CT 46 45 v 23–24) and the Nabonidus inscription (C. J. Gadd, AnSt 8 52:20), $nag\hat{u}$ are also said to be distant ($nes\hat{u}$), but it is not clear if they are located in the sea since both passages are broken.

Further evidence for $nag\hat{u}$ as islands in the sea may be found in *The Gilgamesh Epic* where $nag\hat{u}$ emerge at the edge of the sea as the waters of the flood recede:

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ap-pa-li-is kib-ra-a-li pa-ṭú tâmti(a.ab.ba)
a-na 12 (var. 14)<sup>tubm</sup> i-te-la-a na-gu-ú
a-na <sup>kur</sup>ni-muš i-te-mid <sup>gis</sup>elippu(m.á)<sup>13</sup>
šadû <sup>ú kur</sup>ni-muš <sup>gis</sup>elippa iṣ-bat-ma a-na na-a-ši ul id-din
Gilg, XI 138–41 (Thompson Gilg, pl. 48)
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I scanned the regions at the edge of the sea. At (cach) 12 (var. 14) a $nag\hat{u}$ appeared.

After the ship put in at Mt. Nimuš,

the mountain Mt. Nimuš held the boat fast, did not allow it to rock.

In this passage, the $nag\hat{u}$ are the first outcroppings of dry land to emerge after the flood. These $nag\hat{u}$, therefore, seem to be temporary islands surrounded by the receding waters of the flood.

This meaning of $nag\hat{u}$ ('island') may also be found in three Neo-Assyrian passages. In parallel passages from the inscriptions of Assurbanipal, the newly discovered land of Lydia is described as a $nag\hat{u}$ across the sea:

out of the sea drawn from a frontal view, rather than regions in the sea that are drawn from a bird's-eye view.

¹⁸ For the reading Nimuš, see W. G. Lambert, RA 80 185-86.

mgu-ug-gu šàr ^{kur}lu-ud-di na-gu-u šá ni-bir-ti tâmti áš-ru ru-u-qu ša šarrānu^{mcs} abē ^{mcš}-ia la iš-mu-ú zi-kir šumī-šu VR 2 95–96 (Streck Asb. 20:95–96, cf. 166:13–14).

Gyges, the King of Lydia, a region across the sea, a place which the kings my fathers had not heard mention of.

In a *tākultu*-ritual, *nagi'ānu* (a plural of *nagû*) in the Upper and Lower Seas, as well as the Tigris River, appear to be islands: 14

'didiglat(hal.hal) a-na si-hir-t[i-šá x x x x]
ù na-gi-a-nu 「šá [qé-reb-šá]
tam-tum elītum(AN.TA) tam-t[um šaplitum]
tam-tum a-na si-hir-[ti-šá x x x x x]
ù na-gi-a-nu š[á] q[é-reb-šá]
ù tu-ub-qa-[at er-bet-ti x x x x]

KAR 214 rev. iii 18–23 (Frankena Tākultu 26, collated)

The Tigris in [her] entire[ty...], and the "islands" which [are inside it], The Upper Sea and [The Lower] Se[a], The Sea in [its] entire[ty...] and the islands wh[ich are] in[side it] and the [four] come[rs...]

The $nag\hat{u}$ on the World Map may also be islands, because they lie across the sea from the continent. Yet, this cannot be certain, since two sides of the $nag\hat{u}$ extend into an uncharted area. This uncharted space could represent a body of water, such as a portion of the $t\hat{u}mtu$ beyond the marratu, the Apsu, or even the $m\hat{e}$ $m\hat{u}ti$ 'waters of death' referred to in Gilg. X (see p. 103). However, it is also possible that this terra incognita is a distant land mass, or that the $nag\hat{u}$ extend over the far edge of the earth's surface. In the later case, a traveler crossing over the sides of the $nag\hat{u}$ beyond the cosmic ocean might fall directly into the Apsu or underworld.

The Northern $nag\hat{u}$ (no. 18). The northern $nag\hat{u}$ (no. 18) is identified as 'Great Wall... where the Sun is not seen'. This identification is obscure. 'Great Wall' may literally refer to an actual cosmic wall separating this $nag\hat{u}$ from some other cosmic region, or perhaps figuratively to a 'wall of mountains' located in part or all of the $nag\hat{u}$. In Neo-Babylonian royal inscriptions, high city walls are often compared to mountains, so it is not impossible that Babylonians might likewise have thought of high mountains as a wall. '5

¹⁴ For this passage, cf. K. Deller et. al., Or 56-180. The plural form nagi³ānu may be compared to Aramaic nagwān (cf. VTSup 41-42).

15 See CAD \$/1 36 \$addanis*; VAB 4 82 i 22, 90 ii 5-92 ii 9. For parallels, see Cooper Curse of Agade 42; SBH p. 99 53: 54-55; CT 15 11:11; PSD B 39-40 bad₃ 1.1; CAD \$/1 59 \$adda A 4; and Angim 60:33, where Ninurta brings one of his creatures out of bad. gal gal kur.ra 'Great Wall of the Mountain'. For a possible parallel "Great Wall of Heaven

Two possible explanations for the statement that the Sun is not seen in this region also come to mind. First, the northern $nag\hat{u}$ may be a region of perpetual darkness. Comparable dark regions are found in Gilg. IX iv-v, where Gilgamesh follows the $harr\bar{u}n$ d*sam*i 'Path of the Sun' through total blackness, and in literary traditions concerning Sargon of Akkad. For instance, Sargon of Akkad traverses a dark region in an omen apodosis: 16

...the omen of Sargon, who went through the darkness and a light came out for him.

Second, the missing northern $nag\hat{u}$ may be called 'a place where the Sun is not seen' because the Sun, when viewed from the latitude of Mesopotamia, never passes through the northern portion of the sky. North of the tropic of cancer, the Sun describes an arc in the southern sky throughout the entire year. Thus, some Babylonians might have believed that the Sun never reached the northern skies because of the 'Great Wall'. In this case, however, the northern $nag\hat{u}$ need not necessarily be a land of everlasting night since sunlight could have entered the $nag\hat{u}$ from the south.

The Text on the Obverse

The obverse preserves eleven lines of text. This text is difficult to interpret because the beginnings and ends of each line are missing and the opening portion of the obverse is almost completely lost. Nevertheless, a general concern with distant places and early times is discernible.

Obverse 1'-2'

The first two lines yield only the single phrase ālānu abtūtu 'ruined cities'. The adjective abtu, when applied to buildings, refers to old buildings that have fallen into disrepair (CAD A/1 67). Thus the 'ruined cities', as noted earlier, could be the ruins of uninhabited ancient sites that could no longer be identified by name, such as the ovals labeled uru 'city' on the map (nos. 2, 11).

Obverse 3'-9'

Lines 3'-9' provide information relating to the earliest of times, the era of creation. Lines 3'-4' parallel passages in *Enuma Elish*. The ruined gods in the sea in line 4' are probably to be identified with the creatures of Tiamat that

and Earth' (BAD.ANKI GAL-i) in lines 20, 30 of "The Sargon Legend," scc Horowitz, "The Great Wall of Sargon of Akkad," forthcoming in NA.B.U.

¹⁶ For Sargon of Akkad and the region of darkness, sec J.-J. Glassner, RA 79 122–24. For Gilgamesh and the region of darkness, see pp. 98–100.

¹⁷ This interpretation is suggested by C. B. F. Walker in a brief British Museum leaflet.

Marduk defeats in *Enuma Elish*. In Ee VI 151–54, Marduk is praised by the name Asalluḥi-Namtila and hailed as the savior of these gods;¹⁸

dasal-lú-hi dnam-ti-la šá-niš im-bu-u ilu muš-neš-šu šá ki-ma bi-nu-ti-šú-ma ik-ši-ru ka-lu ilāni ab-tu-ti be-lum šá ina šip-ti-šu el-le-ti ú-bal-li-ṭu ilāni meš mi-tu-ti mu-ab-bit eg-ru-ti zu-²-i-ri i ni-l²u-dal

Ec VI 151-54

Asarluhi-Namtila, secondly they named him, the healing god, who mended all the ruined gods in accordance with its (the name's) structure.

The Lord, who gave life to the dead gods by his holy incantation, who destroys wicked enemies, let us praise (him).

In an inscription of Sennacherib listing elements of a relief depicting the battle in which Assur replaces Marduk, creatures of Tiamat are said to be inside the goddess, just as the 'ruined gods' are inside the sea in obv. 4':

[ti]-amat a-di nab-nit qer-bi-šú Meissner-Rost Senn. pl. 16 edge 2 (OIP 2 142 b 2) (cf. OIP 2 140:10–12)

[Ti]amat together with the creatures inside her.

An analogous tradition is preserved in *The Babyloniaca of Berossus*. Here, creatures are placed inside primeval water, which is later identified with the waters of the primeval Sea-goddess:

They say there was a time when everything was darkness and water, within which monstruous beings lived, which were born alive having strange forms.

F. Jacoby, FGrII 3/1 p. 370(6); (Burstein Berossus 14 2.1)

Later, Marduk defeats the sea and splits it in half. Thus the sea in Berossus is to be identified with Tiamat, whom Marduk divides into two parts in Ec IV 137–38.

Line three mentions Marduk and a bridge. This line can be compared with Ec VII 74–75, where Marduk as dsirsir crosses the sea during battle as if crossing a bridge:

šá ti-amat rapašta^{ta} i-li-ih-bi-ru uz-zu-uš-šú ki-i ti-tur-ri i-ti-it-ti-qu a-šar šá-áš-me-šá

Ee VII 74-75

who crossed the broad sea in his fury, passed over its place of battle as if on a bridge.

Lines 5-9 list animals, beasts, and fantastic creatures. These beings are divided into two groups. As preserved, the first group consists of only two

¹⁶ Cf. Erra IIIe 32: kī šá ila ab!(=*BA)-ta...

beings, the bašmu 'viper' and mušhuššu rabû 'great sea-serpent', which live ina libbi 'inside', presumably inside the sea. Mythological bašmu and mušhuššu are placed inside the sea in other works. Angimdimma 139 (Cooper Angim 80) compares a mace with the mušhuššu of the sea (muš.huš a.ah.ha = mušhuš tâmtim), and the Lahbu myth speaks of a 60-league-long fantastic bašmu that was created in the sea:

i-na tâmti(a.ab.ba) ib-ba-ni ^{muš}ba-[aš-mu] 1 šu-ši bēru(danna) šá-kin ú-rak-[šu] KAR 6 21'-22' (cf. CT 13 33:5-12)¹⁹

In the sea the vi[per] was created. [His] length was set at 60 leagues.

The remaining beings are explained in line 9' as 'beasts which Marduk created on top of the restless sea'. This group consists of the the anzû 'fabulous eagle or winged horse', 20 girtablullû 'scorpion-man', armu 'gazelle', şabītu 'gazelle', apsasû 'zebu, water buffalo', 21 ninru 'panther'. kusarikku 'bull-man', nešu 'lion', barbaru 'wolf', lultmu 'red-deer', būşu 'hyena', pagû 'monkey', pagītu 'femalemonkey', turāhu 'ibex', lurmu 'ostrich', šurānu 'cat', and hurbabillu 'chameleon'.

The statement that Marduk creates these animals on top of the sea' may be compared with the account of the creation of animals in *The Bilingual Account of the Creation of the World by Marduk* (CT 13 35–37 + dupl.). In this text, Marduk creates dry land on top of the sea by building a (reed-)raft (\$\sigma\$diri = amu) and pouring out dirt (CT 13 36:17–18). Then, in lines 20–22, Marduk creates mankind and the animals on dry land on top of the raft, which floats on the sea. Thus, in terms of the map, the two groups of animals may represent the sea-animals that inhabit the marratu and the animals that live above the sea on the continent and the nagû. On the reverse of the tablet (rev. 21'-23'), horned cattle run about on the seventh nagû.

With the exception of the cat, all of the beings listed in lines 5'-8' were not common in Mesopotamia cities, although they were familiar to Mesopotamians from depictions and statues, literary works, and military campaigns in distant lands. For example, representations of the mušhuššu, apsasû, anzû, kusarikku, lion, ape, and monkey adorned the public buildings of Babylonia and Assyria; 22 Assyrian kings brought home hyenas, panthers, red-deer, lions,

¹⁹ For the Labbu myth, see T. Lewis, JAOS 116 (1996) 28-47.

 $^{^{20}}$ For the $anz\hat{u}$ as winged horses in first-millennium materials, note KAR 307:25 (see SAA 3 100), where horses hitched to a chariot are mystically identified with $anz\hat{u},$ and AfO 19 107:21, where the $anz\hat{u}$ -star is identified with the "Horse-star." Cf. A. George, RA 85 157 n. 122.

²¹ In the third millennium, at least, the apsasû (Sumerian áb.za.za) is a real animal that was imported to Mesopotamia from afar (Cooper Curse of Agade 50:21) and is probably to be identified with the Indian water buffalo (see R. M. Bochmer ZA 64 11-13) or the Indian zebu-bull. First-millennium apsasû, on the other hand, are mythological composite creatures that are often represented in palace reliefs (see CAD A/2 193-94).

²² Note for example, AKA 146:16-147:19; Borger Esarh. 61 15-21, 87 rev. 4; Rost Tigl. III 76:29; TCL 3 58:379; Parpola SAA 1 77, 78, 140. See R. D. Barnett, Assyrian Palace Reliefs, 9, 33-34, for drawings of elephants and monkeys.

monkeys, ostriches, and gazelles with them from their campaigns;²³ and the bašmu, mušhuššu, girtablullû, and kusarikku are listed among the eleven creatures of Tiamat in Enuma Elish (Ee I 141-46). These beings may have been considered the fauna of distant lands, and as such would have provided a tangible link with the faraway places on the map.²⁴

Obverse 10'

Line 10' continues the theme of distant lands and distant times, but is concerned with human beings rather than animals. The line lists three famous figures from the third millennium who are associated with far-away places: Utnapištim, Sargon of Akkad, and Nur-Dagan. The first, Utnapištim, is the well-known hero of the flood story that is incorporated into tablet eleven of *The Gilgamesh Epic*. In this account of the flood, Utnapištim is settled in the distant locale *ina pî nārāti* 'at the source of the rivers' as a reward for saving the human race (Gilg. XI 193–98). In the Sumerian flood story, the hero Ziusudra is settled in Dilmun (Lambert-Millard Atra-hasis 144:258-60). Both the home of Utnapištim and Dilmun (modern Bahrain), like the *nagū*, are located across the sea from Mesopotamia.

The second figure, Sargon of Akkad, is the famous third-millennium king who was remembered as a conqueror of the entire world. In terms of the World Map, the empire of Sargon of Akkad would have included the entire central continent as well as the *nagū* across the *marratu*.

The third figure, Nur-Dagan, the king of Buršaḥanda, is the antagonist of Sargon of Akkad in *The Šar Tamḥari Epic*. The Amarna version of the epic (VS 12 193; EA 359) describes the long and arduous journey from Akkad to far away Buršahanda.²⁵

Obverse 11'

The final line of the obverse preserves two phrases. The first, [... w]ings like a bird, may either describe the heroes in line 10' or serve some other function. In Descent of Ištar 10 (Sladek ID 241) and Gilg, VII iv 38, the dead in the

²³ Note, for example, AKA 89:5–90:6, 141:19–25, 201:41–203:46; KAH 84:126–27; and D. J. Wiseman, Iraq 14 34:97–100. For the propaganda value of these beings in royal monumental art, see S. Lieberman, RA 79 88, and M. Marcus, Iraq 49 77–90.

²⁴ For additional literary examples of the beings listed in obv. 5′-8′, note the anzû in Lugalbanda and the various recensions of The Anzu Myth. For the kusarikku in the sea in SB Anzu see JCS 31 92:12. Note also the girtablullů that live by Mt. Mašu in Gilg. IX ii; and the hyena, panther, red-deer, lion, and ibex that are included among the būl nammaššé sēri (herd animals of the steppe) in Gilg. VIII (see O. R. Gurney, JCS 8 92:9–11). For kusarikku, see also M. de Jong-Ellis, Fest. Sjöberg 121–35. For mušhuššu, see F. Wiggerman, RIA 8 455–62. See also the articles by Wiggerman and A. Green in RIA 8 222–64 (Mischwesen A, B), with bibliography.

²⁵ For *The Šar Tamhari Epic*, see J. Westenholz, JAOS 103 329 5. For a recent study of Buršahanda/Purušhanda, see A. Kempinski and S. Košak, Tel Aviv 9 99–100.

underworld wear birdlike garments. However, the flood hero Utnapištim, who is granted eternal life, should not be placed in the underworld.

If the phrase does not describe the heroes, it may refer back to a statement in the broken opening lines of the obverse. In this case, '[...w]ings like a bird' could explain that the world map offers a view of the earth's surface that only birds or passengers on birds' wings could have seen. One such passenger could have been another third-millennium hero, Etana, who flies up into heaven on the back of an eagle in *The Etana Epic*.

The possibility that obv. 11' refers back to the broken opening section finds support in the closing phrase manma qerebšina ul $i[d\hat{u}]$. This phrase includes a suffix that has no antecedent in the surviving text. It is possible that this missing antecedent is kibrāt erbetti ('four quadrants of the earth's surface'), because the closing phrase of the obverse is repeated almost verbatim in rev. 27' after kibrāt erbetti in rev. 26'.

The Text on the Reverse

The reverse is divided into nine sections comprising 27 lines of text. Sections two through eight contain standardized descriptions of the second through eighth nagû. Each section opens with an introductory line that identifies the nagû by number and assigns a distance of seven leagues to the nagû with the phrase ašar tallaku where you go'. A short passage describing the nagû then follows. These descriptions are limited to one or two lines, with the exception of the descriptions of the fifth nagû, which occupies eight lines. Only the descriptions of the third, fifth, seventh, and eighth nagû are even partially intelligible, due to breaks in the text.

The first and ninth sections of the reverse do not describe $nag\hat{u}$. The first section is almost completely lost, but the surviving traces suggest that it introduced the reverse and explained how to identify the first $nag\hat{u}$. The word $tabr\hat{u}ti$ 'wonders' may be preserved in rev. 2'. The following descriptions of the $nag\hat{u}$ relate wondrous features, while rev. 3' 'great s[ea^2' could refer to the cosmic ocean marratu on the map. Line 4', which may preserve the phrase ina $er\bar{e}bi\bar{s}u$ when he enters it', could have explained how to enter the map at the first $nag\hat{u}$. Without an introduction of this sort, it is impossible to correlate the $nag\hat{u}$ on the map with the descriptions on the reverse.

The ninth section (rev. 26'-27') apparently provides a summary of the reverse. This section refers to the *kibrāt erbetti* 'four quadrants' (of the earth's surface).

The Third nagû (rev. 7'-8')

The third $nag\hat{u}$ is described in rev. 8' as a place that winged birds cannot reach. This $nag\hat{u}$ may be a distant desert or a mountainous region. The inscriptions of Assurbanipal describe the desert area of Hararina and Ayalla as "a

place where there are no steppe animals and the bird of heaven does not establish a nest" (Streck Asb. 70:87–88). In the inscriptions of Šamši-Adad V, three mountains in Na³iri are described as "hanging from heaven like a cloud which winged birds cannot pass" (I R 30 ii 47–49).²⁶

The Fifth nagû (rev. 11'-18')

The description of the fifth $nag\hat{u}$ is by far the longest, but it is difficult to interpret due to the poor preservation of the tablet. Two possible interpretations of the fifth $nag\hat{u}$ derive from the ambigous writings MILU and ZINU in rev. 12' and 13'. First, the $nag\hat{u}$ may be a region of wondrous trees. If the word MILU is interpreted as $mel\hat{u}$ 'height', then line 12' may explain that the $nag\hat{u}$ contained tall trees. Elsewhere, distant lands are noted for their unusual trees. Gilgamesh visits a grove of stone-bearing trees in Gilg, IX v-vi, and the Sumerian epic Gilgamesh and the Cedar Forest speaks of a larger-than-life forest. If MILU refers to the height of trees, then ZINU in rev. 13' can represent the word zinû 'date frond', and danīšu 'its blood' in rev. 14' can refer to the sap of the tree, since tree sap as well as animal blood is called damu. For instance, in Šumma-Alu, a felled date-palm sheds its "blood":

šumma ^{gš}gišimmara šap-liš tak-ki-is-ma da-mi iq-qí . . . CT 41 19:12 (cf. CAD D 79 damu d)

If you cut a date-palm down and it sheds sap ...

Further support for the identification of the fifth $nag\hat{u}$ as a region of trees is found in rev. 16' "You/I go seven leagues." In *The Šar Tamhari Epic*, the road to Buršaḥanda is blocked by a seven-league region of forested mountains (VS 12 193:28–32). A possible verbal form, nillu 'which we climb', in rev. 15' may then refer to an ascent of tree-covered mountains or an attempt to climb the fantastic trees themselves.²⁸

Second, the *nagû* may be a region of high rainfall and flooding, because MLLU could represent *mtlu* 'flood' and ZLNU could represent *zinnu* 'rain'. It is difficult, however, to explain *damu* in this context.²⁹

The only clues that might help identify MLLU and ZLNU are the figures of 840 cubits and 120 cubits in rev. 12'-13'. These measurements, however, probably belong to the missing second halves of the lines, rather than to MLLU and ZLNU.

²⁶ For similar phrases, see CAD Š/I 52 šadū b); AKA 270 49; Streck Asb. 72:110, 204:11–12, 31–32; TCL 3 16:98; E. Weidner, AfO 6 82:30.

²⁷ For Gilgamesh and the Cedar Forest, see A. Shaffer, JAOS 103 307-11.

²⁸ Note also the seven mountains that Gilgamesh crosses in Gilgamesh and the Cedar Forest and the seven mountains that Lugalbanda crosses in Lugalb. 122:344.

²⁰ Another possibility for rev. 15' is $[u\bar{s}]nill\bar{u}$ '[they l]aid (the dead) to rest' (see CAD N/1 206); this might be in some way related to 'blood' in rev. 14'. A further possibility would be to emend rev. 14' mi-laml-mi- $\bar{s}u$ ul im-mar 'its (the Sun's) shine he does not see' and speculate that the fifth $nag\hat{u}$ is a region of darkness (for mi-lam-mu as the glow of the Sun, see BWI. 126:11); in this case, the fifth $nag\hat{u}$ might be identified with the northern $nag\hat{u}$ on the map.

The Seventh nagû (rev. 21'-23')

The seventh $nag\hat{u}$ is described as the home of horned cattle. Horned cattle may have been included among the fauna of distant lands, together with many of the animals on the obverse. It is probable that rev. 23' 'move fast and reach' describes the horned cattle, although there may be room for a change of subject at the end of rev. 22'.

The Eighth nagû (rev. 24'-25')

The eighth $nag\hat{u}$ may be located in the far east, where the Sun rises. The verb in line 24', ti- δe^{-2} -ru, may be understood as a third-person feminine subjunctive present-future of δe^{-2} to rise early', with an incorrect prefix ti/te_9 for Babylonian dialect tu. A reading te_9 provides a possible Assyrian form, but the World Map is a Babylonian text (and copy).

The noun handūru may refer to a gate of sunrise at the eastern end of the earth's surface, or to part of such a gate. The Sun. Moon, and stars often enter and leave the sky through heavenly gates (see pp. 265–67). Evidence associating handūru with gates is found in the inscriptions of Sennacherib and lexical lists. In a Sennacherib inscription, one of the western gates of Nineveh is named abul handūri:

dšár-ur, mu-šam-qit a-a-ab šarri abul ḥa-an-du-ú-ri CT 26 32 viii 3 (OIP 2 113)

"Sarur, destroyer of the enemy of the king," (is the name of) the handuru-gate.

In both Malku II and Explicit Malku III (ZA 48 240:170; CT 18 3 ii 17), a near homonyn andurû is equated with daltu (door). However, there is no proof that andurû and handūru are related, and handūru in the gate-name may have nothing to do with the gate itself.

Without the missing first part of the line, it is not possible to determine if δu in $hand\bar{u}ri\delta u$ refers back to the eighth $nag\hat{u}$ or to a different antecedent. Likewise, the last word $u/\delta um$ -[x-x] may be a II- or III-stem main verb or a noun acting as the subject of $ti\delta\hat{e}ru$. 31

The Ninth Section (rev. 26'-27')

Reverse 26' refers to the kibrāt erbetti 'four quadrants' of the earth's surface, but the complete phrase is missing due to a break. Peiser's early copy

 30 The phonetic switch of $\it a$ to $\it h$ in opening syllables also occurs in words such as $\it ann @l/hann @l/hann and \it ammu/hanmu$.

³¹ The last word, if it is a noun, may be restored šam-[šá-tu] 'sun-[disk]', with the translation "where the sun-disk dawns at its entrance." For šamšatu in astronomical contexts, see CAD Š/I 334 2 and SAA 8 337. For the sun with the verb šêru in the astronomical omen KUB 37 150:11, see CAD Š/2 335 šêru A c. A translation 'where storms whirl around' from CAD Š/2 259 še-eru may also be possible.

shows a full HI sign (\angle) after kal, instead of the single stroke (\angle) now preserved at the end of the line. This HI can be read šár or taken as the first half of IM, allowing for three possible restorations:

- ... kib-rat er-bet-ti šá kal kiššati (šár)
- ... four quadrants of the entire universe.
- ... kib-rat er-bet-ti šá kal šā|rē](1[M)meš]
- ... four quadrants of all the wi[nds.]
- ... kib-rat er-het-ti šá kal šā[r erbetti]
- ... four quadrants of all fo[ur winds.]

Parallel passages where the 'four winds' refer to the entire earth's surface are found in Shamash Hymn 151–52 and *The Tukulti-Ninurta Epic* (Machinist TN Epic 66 I:A 13').

Reverse 27' preserves the phrase *qerebšina manma la idû* 'which no one can comprehend'. The suffix *šina* here, as noted earlier, apparently refers back to *kibral erbetti* in rev. 26'. Thus the closing section of the text seems to explain that the earth's surface extends for an incomprehensible distance to the north, south, east, and west of Babylonia.

The Babylonian Map of the World and Distant Places

The emphasis on distant places in the texts accompanying the map suggests that the purpose of BM 92687 was to locate and describe distant regions. The map illustrated where these distant areas were located in relation to familiar locales, such as Babylon, Assyria, and the Euphrates. The obverse related these distant places to familiar literary figures and exotic animals, and the reverse described conditions in the far-away regions. The ancient author's interest in distant places reflects a general interest in distant areas during the first half of the first millennium, when the Assyrian and Babylonian empires reached their greatest extents. Other manifestations of this interest include the construction of kirimāḥu 'botanical gardens', filled with the flora of distant lands in Assyria during the reigns of Sargon 11, Sennacherib, Esarhaddon, and Assurbanipal; 22 the aforementioned expedition of Shalmaneser III to the sources of the Tigris and Euphrates (Layard ICC 92: 92–93); and the writing of The Sargon Geography, a text purporting to describe the worldwide empire of Sargon of Akkad—all during this same period (see pp. 92–93).

The Babylonian Map of the World, Greek Maps, and Babylonian Geometry

Although the Babylonian Map of the World is unique among cuneiform documents, there is textual evidence that Greek geographers developed compa-

³² For royal kirimāḥu, see CAD K 406; D. J. Wiseman, in Monarchies and Socio-Religious Traditions in the Ancient Near East (= Bulletin of the Middle-Eastern Cultural Center in Japan, Vol. 1 (1984) 37–43.

rable maps during the middle of the first millennium. Herodotus (Book IV 36 of his history) refers to circular world maps before providing his own description of the inhabited world:

I laugh when I see so many men drawing maps of the Earth, as none till now have drawn reasonably, for they draw Oceanus flowing in a circle around the Earth as if drawn with a compass making Asia equal to Europe, but I myself will explain how big each of them is and how to draw them.

Unfortunately, none of the Greek maps dismissed by Herodotus have survived. One map that Herodotus may have seen was the map of Anaximander (610–540), a disciple of Thales. This map and similar antique maps are discussed by the fourth century B.C.E. geographer Agathemenus:

Anaximander, the Milesian, the disciple of Thales, was the first to draw the inhabited world on a tablet ... and the ancients drew the inhabited world as round and Greece lay in the middle, and Delphi (lay) in the middle of it for it is the umbilicus of the Earth ... and swift flowing Oceanus completed a circle around the Earth

C. Muller, Geographi Graeci Minores 11 471-7288

Both the Greek maps described by Herodotus and Anaximander and the Babylonian map on BM 92687 share a belief that the inhabited world was surrounded by water. In Greece, the cosmic ocean Oceanus, like the marratu on BM 92687, was believed to encircle the continental portion of the earth's surface. Both Homer and Hesiod indicate that Oceanus surrounded the inhabited world, and Strabo in Book 1.1: 8 of his geography explicitly states that the inhabited world is an island encircled by Oceanus.³⁴ In Mesopotamian literature, one finds a parallel tradition in The Bilingual Creation of the World by Marduk (CT 13 85-37), which states that Marduk created dry land on a raft floating upon and surrounded by the cosmic sea (see pp. 130-31). Nonetheless, BM 92687 does not fully agree with the Greek traditions. First, the compass point at the center of the Greek maps is identified as Delphi, while the compass point on the Babylonian map is unlabeled. The city of Babylon is drawn as a rectangle above the compass point and thus cannot be considered the umbilicus of the Babylonian world. 35 Second, the Greek maps do not include any land areas beyond Oceanus that can be compared with the nagû on the Babylonian map.

Another similarity between the Babylonian and Greek maps is the shared use of geometric shapes to represent topographic features. In the map of

³⁴ Homer Iliad XVIII 607-8, XXI 195-96; Odysscy XI 13, XXIV 11-12; Hesiod Theogony 789-91; Shield of Heracles 314. See also Strabo Book I.1 3, where the geographer notes that Homer indicated that Oceanus encircled the inhabited world.

35 The indentification of Nippur and Babylon as bonds of heaven and earth (dur. an.ki = markas šamê u erşeti) is never explicitly interpreted in Mcsopotamian texts to mean that the cities are placed at the exact center of the earth's surface.

³⁸ Another early Creek map was the map that Aristagorous of Miletus brings to Sparta in Herodotus V.49. This map consists of "the entire world, entire sea, all the rivers" drawn on a bronze tablet. Later Greek world maps include the third century B.C.E. map of Eratosthenes that is described by Strabo (Book II.1 1); and the second century C.E. maps of Marinus of Tyre and Claudius Ptolemy (see E. I. Stevenson, cd., Geography of Claudius Ptolemy, The New York Public Library, New York, 1932).

Anaximander, two concentric circles and the compass point represent the general outline of the earth's surface, with Delphi in the middle. On the Babylonian world map, various standard geometric shapes, including the *kippatu* 'circle', santakku 'triangle', nāru 'river', nalbattu 'brick mold' (no. 13) and ini alpi 'eye of an ox' (no. 1)³⁶ represent the various features of the earth's surface. These shapes are also found on BM 15285 (RA 54 132-33), an Old Babylonian tablet illustrating geometric problems, so it apppears that the author of the Babylonian world map was well versed in geometry.

Two other Mesopotamian mathematical texts even include illustrations that are similar in design to the sketch on the world map. Böhl Collection 1821 (W. Leemans, CRRAI 2 31–35; A. Kilmer, Studies Oppenheim 142–43) presents a geometric problem concerned with a new residential area ringing an older city center. This problem is illustrated by two concentric circles, just as the continent and marratu, without the nagû, appear as two concentric circles on the map. A second text, BM 85194 i 37–52 (MKT II pl. 5; Studies Oppenheim 144) preserves three concentric circles that illustrate a geometric problem concerned with the area of a city ringed by a ditch and a dike. Another mathematical text even includes the geometric shape "circle in a circle" in a list of standard geometric functions:

ki-pa-tam i-na li-bu kip-pa-tim e-pé-ša-am ki-pa-t[am] ^ra¹-na ši-na ut-he za-za-am e-pé-ša-am i-na li-bu na-al-ha-tim ki-pa-ta-am i-na li-bu ki-pa-tim na-al-ba-ta-am IM 52916 rev. 18–21 (Sumer 7, third plate following p. 154)

To make a circle inside a circle.
To make the division of circle into two equal parts.
(To make) a circle inside a brick-mold.
(To make) a brick-mold inside a circle.

Furthermore, the map and text on the reverse arc similar in format to geometric problems that consist of diagrams and second-person procedural instructions. The map can be considered a diagram, and the text on the reverse repeats the phrase ašar tallaku 'where you go'. Thus it is possible that geometric conventions, as well as cosmographic traditions, influenced the development of *The Babylonian Map of the World*.

³⁶ For the geometric shape 'eye of an ox', see Sumer 7 137:12. The shape of the region labeled mountain on the world map (no. 1) is identical to the shape of ox eyes on reliefs such as those in R. D. Barnett, Assyrian Palace Reliefs, pl. 36.

The Flights of Etana and the Eagle into the Heavens

Introduction

The Etana Epic tells the story of Etana, a king of Kish, who is described in The Sumerian King List as sipa lu an.šè ba.e₁₁.dè lú kur.kur mu.un. gi.na 'a shepherd who ascended to heaven, who organized the lands' (AS 11 80:16–18),¹ an eagle, and a snake. Near the end of the preserved portion of the text, Etana and the eagle fly up into heaven. The account of their flight provides information concerning the geography of the heavens and the appearance of the earth's surface when viewed from above.

The Etana Epic is known from Old Babylonian recensions, from both Babylonia and Susa, and from Middle-Assyrian and Neo-Assyrian recensions.²

 1 This same tradition is also known from the bilingual myth of the "Seven Sages" (E. Reiner, Or n.s. 30 2:1'–4'); the Late Babylonian omen BRM 4 13:33: šumma(sE, trānu(§ā.nigin) kīma(gim) erî (tig) "usen amūt(Bà)" de-ta-na šarru šā ana šamē" elū(e_1) å 1f the "roil" is like an eagle, it is the omen of Etana, the king who ascended to heaven"; and a passage in a poem about early rulers where Etana is identified as Entena:

[me].e men.te.n[a lu] gal.e lú an.šè bi.in.è.dè (Sumerian Version) B. Alster, ASJ 8 4 B II 4; Emar 767:12

me.e men.t[e.na lugal.e lú.an.šč bi.in]. le₁₁!.|d|č a-le-e m[e-ta-n]a ša [a-na šamê* e-lu-ú]

(Bilingual Version) Emar 767:12 Where is Etana, the king, who ascended to heaven?

The poem about early rulers is at least as old as the Old Babylonian period (see M. Civil, Aula Orientalis 7 7 no. 767). For an etymology of the name of Etana, the who went up to

heaven', see AS 11 80-81.

² For the Akkadian "Series of Etana" in literary catalogues, see W.G. Lambert, JCS 16 66 VI 11; Kramer AV 314 K. 13684+ 5; Bezold Cat. 1627 20. Although no Sumerian examples of Etana have been identified, the story of Etana and the Eagle's flight to heaven, at least, must have circulated in the third millennium, because Etana's ascent to heaven is recorded in *The Sumerian King List*, and a hero (probably Etana) is drawn on an eagle's back in Old Akkadian cylinder seals (see n. 20). See also Kinnier Wilson Etana 27-28.

Month in Mul-Apin	Minas for Day Hours	Degrees
Nisan	3,00	180
lyar	3,20	200
Sivan	3,40	220
Tammuz	4,00	240
Ab	3,40	220
Elul	3,20	200
Tisreh	3,00	180
Arahsamnu	2,40	160
Kislev	2,20	140
Tebet	2,00	120
Shevat	2,20	140
Adar	2,40	160

horizon to horizon at the equinoxes. However, on all other days during the year, the day and night portions of the circle would not be equal. For example, according to this model, at the winter solstice, the Sun would be visible above the horizon for only one-third of its path $(2,0~\rm U \c S=120^\circ)$, but invisible below the horizon for two-thirds of its path $(4,0~\rm U \c S=240^\circ)$. At this time, circumpolar stars would be visible at night for two-thirds of their path at the winter solstice, but only one-third of their path at the summer solstice. It is not clear, however, how the mechanics of such a system would have worked.

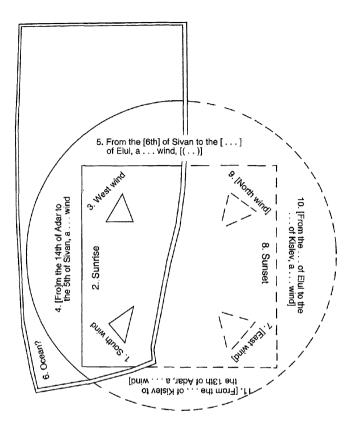
⁶¹ By the first millennium, Mesopotamian astronomers had already recognized that the 4:22:4 ratio between day and night hours was false, and a better approximation for the differential between day and night hours at the solstices, 3:22:3, was established (see O. Neugebauer, Isis 37 38; Hunger Pingree Mul-Apin 153-54). For previous studies on the numbering system for day and night hours in the "Astrolabes" and Mul-Apin, see O. Neugebauer Isis 37 40; Weidner Gestirn-Darstellungen 19-20; F. Rochberg-Halton, Centaurus 32 150-51; A. George, AfO 38/39 52-73; and see n. 57 above. Note that E. Weidner (HBA 65-76) and T. Pinches (JRAS 1900 573-75) previously understood the numerals on the circular-Astrolabes as units of 60.

BagM. Beih. 2 no. 98 and the Compass Points

BagM Beih. 2 no. 98 (W.20030/121) preserves a small flake in Late Babylonian script from the Reš Temple in Uruk that may shed some light on Mesopotamian ideas of the shape and orientation of the heavens and earth's surface. When complete, the text included a diagram that apparently consisted of a circle enclosing a square-containing four triangles. Only about one-half of the diagram remains, including two triangles and slightly less than half of the square and circle.

Edition

1.	™ùlu¹⁰	Southwind	
2.	<i>ṣīt</i> ^d š <i>amši</i> (^d utu.è)	Sunrise	
3.	<i>™amurru</i> (mar.dú)	Westwind	
4.	$[i\ddot{s}\text{-}t]u^{\text{itu}}addari(\breve{s}\text{e.kin}) ^{f}u_{4} ^{h} 14 a\text{-}di [^{itu}]sim\bar{a}ni(s\text{i}g_{4}) u_{4} 5 \text{IM} \breve{S}\text{L}\breve{S}\text{L}IK.TUM}$		
	[Fro]m the 14th of Adar to the t	he 5th of Sivan, a wind.	
5.	iš- tu itu $sim\bar{a}ni$ u_4 [6] a - di itu $ul\bar{u}li$ (kin. finnin! 1. na) [u_4 . ()] IM 4^k am /ZA x [()]		
	From the [6th] of Sivan to the [] of Elul, awind ()]		
6.	$\dots]$ ^{id?} [mar - ra - tum ? \dots	Ocean?	
7.	[Eastwind]		
8.	[Sunset]		
9.	[Northwind]		
10.	[From the of Elul to the of Kislev, a wind.]		
11.	[From the of Kisley to the 18th of Adar, a wind.]		



The diagram on BagM. Beih. 2 no. 98 seems to correlate the positions of the four winds, the locations of sunrise and sunset, and the seasons of the year. The area within the square preserves two triangles that are labeled "Southwind" (no. 1) and "Westwind" (no. 3), with the space between them labeled "Sunrise" (no. 2). Based on this pattern, it may be surmised that the missing half of the square preserved triangles labeled "Northwind" (no. 9) and "Eastwind" (no. 7), with the space between these triangles labeled "Sunset" (no. 8). Along the sides of the square, between the square and the circle, two short inscriptions are preserved. Periods of approximately three months are listed, with what appear to be names or descriptions of winds. One side deals with the period from Adar to Sivan, which is the spring season (no. 4), and the second

side deals with the period from Sivan to Elul, which is summer (no. 5). Thus each side of the square apparently represents one of the four seasons, and each season is assigned a characteristic wind. Traces of a sign (no. 6) are also found beyond the circle that encloses the square.

The significance of the diagram is difficult to determine. No accompanying explanatory text, such as that found with the World Map, is available, and it is not certain how much of the text is missing, because the flake does not preserve any edge or provide an indication of the thickness of the original tablet. It is not even certain where the top of the diagram is. The surviving text is symmetrical, with the bases of all signs drawn toward the center of the diagram. Thus, the diagram in its present form has no top or bottom. Furthermore, the diagram need not be aligned according to the north-south axis used on most modern maps; there is no such convention in ancient maps. For example, the Map of the World and a late third-millennium map of Nippur (S. N. Kramer FTS² 274) are drawn along axes following the course of the Euphrates, and an Old Akkadian-period map from Nuzi (HSS 10 1) is drawn with "westwind" at the bottom.²

Despite these uncertainties, it seems likely that the diagram was meant to correlate at least two sets of variables: those placed inside the square (sunrise, sunset, north, south, east, and west winds), and those placed outside the square (the seasons of the year, with their characteristic winds). Before examining this hypothesis further, it is first necessary to consider how ancient Mesopotamians identified the four compass-point directions and to examine BagM Beih. 2 no. 98 in greater detail.

Winds and Compass Point Directions in Ancient Mesopotamia

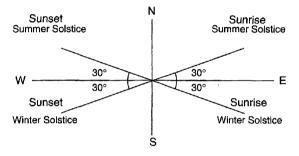
Ancient Mesopotamians possessed no reliable method for determining due north, south, east, and west. Modern compasses were not invented until approximately 1000 C.E., and the modern North Star (Polaris) was more than 12° south of due north during antiquity. Therefore, other less reliable indicators were used to determine the approximate locations of the four compass points. These indicators included the Sun, winds, and stars.

¹ The total number of days in No. 4, from the 14th of Adar to the 5th of Sivan, is 80 days in an ideal 360-day calendar of twelve 30-day months. No reason for a period of 80 days is clear, but the number of days in No. 4 may be compared with a period of 160 days (twice 80) in a first-millennium religious-mystical text (see Livingstone 256-57 BM 34035 50-53 and cf. ibid, 255 BM 34035 1-8).

² For Neo-Babylonian field plans with cardinal points other than north at the top, see Nemet-Nejat I.B Field Plans 373-74 Table IVB. For related tables, see Nemet-Nejat LB Field Plans 371-72, 375-81. For the Nuzi map, see Frayne, AOS 74 81-82.

The Sun

Numerous Sumerian and Akkadian texts use the terms "sunrise" and "sunset" as terms for "east" and "west". This is not surprising, because the sun rises each day in the east and sets in the west, but only on the first days of Spring and Autumn does the sun actually rise and set due east and west. During the Spring and Summer months, the sun actually rises and sets north of due east and west. Conversely, in the Autumn and Winter, the sun rises and sets south of due east and west. The maximum deviation of the locations of sunrise and sunset from due east and west occurs at the Summer and Winter solstices. At the latitude of Babylon, the Sun appears to rise and set approximately 30° north of due east on the first day of Summer, and 30° south of due cast on the first day of Winter. 5



These variations were recognized by Mesopotamian astronomers. A Mul-Apin fragment explains that the sun spends different seasons of the year in different paths of the sky (see p. 173), and Mul-Apin II states that the Sun moves toward the south after the Summer solstice (II i 11–13) and toward the north after the Winter solstice (II i 17–18).

The Winds

The northwest-southeast mountain ranges east of Iraq influence the winds of Mesopotamia. As a result, the prevailing winds are northwest and southeast winds, rather than true north, south, east, and west winds.

Ancient Mesopotamians, like ourselves, recognized four primary winds (north, south, east, and west), and assigned the names of the four winds to the four compass points. In Sumerian, north is called ™si.sá or ™mir, south is called ™ùlu, east is called ™kur.ra, and west is called ™mar.dú. The signifi-

 $^{^4}$ For examples of ereb $^{\rm d}$ šumši and stt $^{\rm d}$ šamši used as terms for 'east' and 'west', see CAD E 258–59 and CAD S 216–17.

⁵ See Meteorological Office (U.K.), Observer's Handbook, ² p. 155 (bottom diagram), where the distance between the positions of sunrise and sunset and due east and west, at a latitude of 34°N on June 22, is just under 30°. The sun rises and sets slightly nearer to due east and west at the latitude of Babylon (32°30′N). For the times of sunrise and sunset in Nineveh and Assur, see Parpola LAS 2 408-9.

cance of the names for the east and west winds is certain. The name of the east wind, Mkur.ra 'mountain wind' refers to the mountains east and northeast of Mesopotamia. The west wind, Mmar.dú, bears the name of the Amorites, who arrived in Mesopotamia from the west in the third millennium. In Akkadian, the names of these two winds, Mšadû and Mamurru, are exact equivalents of the Sumerian names.

The derivations of the Sumerian names of the north and south winds and the corresponding Akkadian names ™iltānu/™ištānu and ™šūtu, are less certain. Sumerian 'north wind', ™si.sá 'appropriate/straight wind' (si.sá = ešēru), may reflect the fact that the most common wind in Mesopotamia blows from the northwest. Akkadian ™iltānu/™ištānu may be the same word as a homonym meaning 'the number one' (see CAD I/J 275). However, there is evidence that the south wind was considered to be the "first" wind, followed in order of priority by the north, east, and west winds. The winds are listed in this order in Erimhuš II 82–85 (MSI. 17 30–31), Emar 576 1′–4′, and a passage in *The Practical Vocabulary of Assur* (AfO 18 334: 841–44) that can be restored on the basis of KAV 81:⁷

 $IM.1 = \check{s}u$ -u-tu 'south wind' IM.2 = [i]l-ta-nu 'north wind' $IM.3 = \check{s}\check{a}$ -du-u 'east wind' IM.4 = [a]-mur-ru 'west wind'

Ancient Mesopotamians (like ourselves) named the winds for their origins, rather than the direction toward which the winds were blowing (i.e., a north wind has its origin in the north and blows southward). This is demonstrated by the story of the violent southwind *šūtu* that sinks the boat of Adapa in *The Adapa Epic*:

be-lí a-na bi-it he-lí-ia i-na qá-a-ab-la-at ta-am-ti nu-ni a-ba-ar

ta-am-ta i-na mé-še-li im-ši-il-ma šu-ú-tu i-zi-qá-am-ma ia-a-ši uṭ-ṭe-eh-ba-an-ni

[i-n]a bi-it nu-ni ul-ta-am-și-il i-na ug-ga-at li-ib-bi-ia [šu-t]a at-ta-za-ar (Picchioni Adapa 118:62–67, cf. 114 B 1–6)

My lord, for the house of my lord I was catching fish in the midst of the sea.

The sea was like a mirror then the south wind blew and sank me.

⁷ Note also the partially preserved list of winds in MSL SS1 86, Kagal D Section 1 (MSL 13 244), and MSL 17 44 RS 25.425 10'-17'.

⁶ The term mar.dú first occurs in Fara texts (see RCTC 1 115). For the homeland of the Amorites in Syria, see, for example, Buccellati Amorites 235–37.

I spent the night [i]n the "house of fish." In my anger I cursed the [south wi]nd.

The common south wind in southern Mesopotamia is a calm southeast wind, but a strong, violent southwest *suhaili* wind also occurs, bringing clouds, rain, and fog in its wake. This southwest wind from the gulf poses a danger to small craft on the Persian Gulf, such as the boat of Adapa. Thus *šūtu* '(ancient) south' must include modern southwest or be equivalent to modern southwest.⁸

As of yet, no ancient device to determine the directions of winds has been identified. However, an obscure passage from "The Fable of the Willow" may refer to a weather vane of some sort that was placed on roofs or aboard ships:

```
a-na šu-zu-ub ú-ri šá-kin x [...
ki-ma ki-li-li ēkallu zu-<sup>3</sup>u-na-at x [...
[i]ş-şur šá-a-ri ana maš-tak šāri i-na-ţa-lu
[x]x[x]<sup>f</sup>e <sup>lú1</sup>malāḫu(ma.laḫ₄) i-za-bi-la [...
```

BWL 166:11-14

[...] . is placed to save the roof.

Like a headband, the temple is adorned with [...

They look at the "[b]ird of the wind" to test the wind.

... the sailor carries [...

The 'bird of the wind' in this context may be compared with the rooster that sits atop many modern weather vanes.⁹

The Stars

Although no single star, such as the modern pole-star Polaris, served as an indicator of the compass-point directions in ancient Mesopotamia, it is clear that Mesopotamians did use combinations of stars and constellations to determine the locations of north, south, east, and west. One section of Mul-Apin II even explains how to determine all four compass points by observing the stars:

- 68. *šum-ma mu-ṣe-e šārī* ^{meš} ana amāri(igi.lá)-ka ^{mul}mar.gíd.da ina tīb(zi) [™]iltāni(si.sá) park[a]t([g]ib)[^á]^t
- 69. ^{mul}ku₆ *ina tīb* [™]šūti(ùlu)^{lu} *parik* ^{mul}gír.tab *ina tīb* [™]amurri(mar.dú) park[a|t|^a|'
- 70. mulšu.gi u mul.mul ina tīb ™šadî(kur.ra) izzazzū meš z |u|
- 71. ina u₄-me maşşarti(en.nun)-ka šāra šá illaku
^{ku} kakkabānu $^{\rm meš}$ ú-kal-la-mu-k[a]

Mul-Apin II i 68–71 (II
unger Pingree Mul-Apin 87) $^{\rm 10}$

 8 Note also G. Roux, RA 55 15–20, and Gudea Cyl. A xi 19–23, where the northwind ($^{\text{IM}}\text{mir}$) dwells in the mountains "north" of Mesopotamia. Mountains are found both northeast and northwest of Mesopotamia.

⁹ For the winds in Mesopotamia, see further R. Englund, JESHO 31 166 n. 37. For a study of wind directions in Hittite texts, see J. de Roos, Journal of Ancient Civilizations 5 (1990) 87–96.

¹⁰ For this passage, see more recently. J. Koch, AfO 42/43 155-62.

- 68. In order for you to observe the departure of the winds: Ursa Major lies across the rising of the north wind,
- 69. Piscis Austrinus lies across the rising of the south wind, Scorpio lies across the rising of the west wind,
- 70. Perseus and the Pleiades stand at the rising of the east wind,
- on the day of your observation, the stars will tell you which wind is blowing.

The correlations between stars and winds in this passage are reasonably accurate. Ursa Major is a northern star, Piscis Austrinus is a southern star, and Scorpio and the Pleiades are said to be located across from each other at the eastern and western ends of heaven in Mul-Apin I:

```
mul.mul inappaḥ(kur)-ma <sup>mul</sup>gír.tab irabbi(šú)<sup>h</sup>

<sup>mul</sup>gír.tab inappaḥ (kur)-ma mul.mul irabbi(šú)<sup>h</sup>

Mul-Apin I iii 13–14 (Hunger Pingree Mul-Apin 47)
```

The Pleiades rise when Scorpio sets. Scorpio rises when the Pleiades set.

Thus for a time each year, the Pleiades would rise at the eastern horizon while Scorpio was setting at the western horizon, when Ursa Major and Piscis Austrinus were to be found in the northern and southern quadrants of the sky. Mul-Apin I identifies this time of year as the beginning of Iyar:

```
ina^{itu}aiari(gu_4)\ u_4\ l^{kam}\ mul.mul\ innammar(igi.lá) Mul-Apin l ii 38 (Hunger Pingrec Mul-Apin 40)
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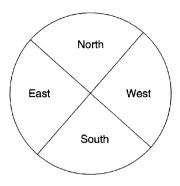
On the 1st of Iyar, the Pleiades are seen.

The first of Iyar occurs just after the Spring equinox on the 15th of Nisan in *Mul-Apin* (see Mul-Apin II i 19–21), so sunrise and sunset on this day would be very close to due east and west. Nevertheless, west in Mul-Apin II i 69 seems to be southwest rather than due west, because Scorpio is an Fa-star (southern star) in Mul-Apin I ii 29 rather than an equatorial Anu-star, as is the Pleiades in Mul-Apin I ii 44. This demonstrates that "west," as well as "south" (as in *Adapa*), includes southwest. Thus, as E. Weidner recognized in AfO 7 271, each compass-point direction in Mesopotamia included a range of 90°, with "north" including areas from northeast to northwest, "south" areas from southeast to southwest, "east" areas from northeast to southeast, and "west" areas from northwest (see diagram, p. 200). 11

¹¹ For similar models of winds and compass points in astrology, see Parpola LAS 2 406–7; AfO Beih. 22 53–54. Note in this context a south(-east) wind in an astronomical diary:

[「]ÙLU¹ šá ana KUR şal-pu illiku(du) Sachs-Hunger Diaries I p. 164 -383: 8

a south wind which slants to the east blew.



Topographic Features

In addition to the position of the sun, the winds, and the stars, topographic features also seem to have influenced Mesopotamian conceptions of the compass points. The name of the east wind, 'mountain wind', points to the role of the mountains in Mesopotamian conceptions of 'east'. Similarly, identifications of the Persian Gulf and Mediterranean as seas of sunrise and sunset, in passages such as the following excerpt from a Sennacherib inscription, suggest that these bodies of water influenced Mesopotamian views of "east" and "west": ¹²

ul-tu tâmti(a.ab.ba) e-li-ni-ti ša šá-lam dšamši ši a-di tam-tim šap-li-ti ša și-it dšamši ši gim-ri șal-mat qaqqadi(SAG.DU) ú-šak-niš še-pu-ú-a

OIP 2 163 i 13-15 (OIP 2 23)

From the Upper Sea of the setting sun to the Lower Sea of the rising sun I made all of the human race submit at my feet.

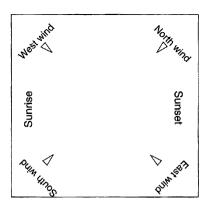
The head of the Persian Gulf is in actuality southeast of Babylonia and Assyria, rather than due east, providing further indication that 'east' includes a range of 90° from northeast to southeast. The Mediterranean coast is reached by traveling north and then west from Babylonia but lies due west of Assyria.

Examination of BagM Beih. 2 no. 98

The Square

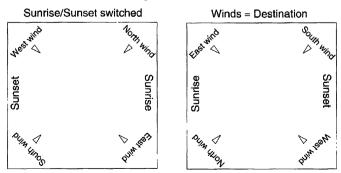
When complete, the square almost certainly contained four triangles labeled north, south, east, and west winds, with two of the spaces between the triangles labeled sunrise and sunset:

¹² For additional examples, see AOAT 6 345-47.



This restoration is problematic because it results in the sun rising in the west and setting in the east! It is suggested in the catalogue of BagM Bcih. 2 (pp. 20–21) that the labels attached to the triangles reflect the ultimate destinations of the winds rather than their points of origin. If so, the south and west winds would originate in the north and east. Yet, as noted earlier, there is no evidence that winds were named for the direction they are blowing toward in Mesopotamian texts, while Adapa clearly identifies a wind blowing from the southwest as šūtu 'southwind'. Two possible explanations for the impossible placement of 'sunrise' remain. First, it is possible that 'sunrise' and 'sunset' have been switched on BagM Beih. 2 no. 98 as the result of a scribal error. Switching 'sunrise' and 'sunset' yields the same result as placing the south and west winds in the north and east. 13

BagM Beih. 298



¹⁸ Note for example Nemct-Nejat LB Field Plans 374 Table IVC, which lists eight tablets where north and south, or east and west, are reversed.

The second possibility is that BagM Beih. 2 no. 98 illustrates a device where 'sunrise' and 'sunset' can be moved independently of the triangles representing the winds. In this case, the tablet could depict an impossible placement of 'sunrise' that a user could correct, just as the arrow of a compass is meant to be turned to point toward the side labeled 'north'. For instance, the square, circle, and triangles could have been placed on separate pieces of wood that were held together by a peg, with 'sunrise' and 'sunset' attached to this same peg by thin pieces of wood, reeds, or rope. This would have allowed the square, circle, triangles, and 'sunrise' and 'sunset' to move in relation to one another. In fact, the "impossible" placement of sunrise and sunset in the west and east on such a device might very well indicate that the elements in the square, at least, functioned as a rudimentary sundial of some sort, where the morning shadow at sunrise fell to the west and evening shadow at sunset fell to the east. 14

The Names of the Winds in No. 4 and No. 5

Neither the Spring wind in no. 4 nor the Summer wind in no. 5 can be positively identified. ¹⁵ The first signs in the wind-name in no. 5 may be read either 4^{kom} or ZA-x. In the former case, the wind-name almost certainly represents 'west wind' (amurru), because the numeral 4 is used to write amurru both in lexical lists (see p. 197) and in Šumma- Λlu and other texts. ¹⁶ An identification of 'west wind' as the Summer-wind in no. 5 would be appropriate since west winds are common during the months of June, July, and August in southern Iraq. ¹⁷ However, it is not clear why the numeral 4 here is written $\lim \mu_5$ (ZA) instead of the more common $\lim \mu$ (GAR).

Other possible identifications of the wind name are even less satisfactory. An identification of IM 4 as \tilde{sar} erbetti (the four winds = north, south, east, and west winds) is improbable, because south and east winds are not common during the Summer months in Iraq, and no wind name, or adjective describing winds, beginning za, \tilde{sa} , or $s\tilde{a}$ is obvious. 18

¹⁴ On a sundial, the seasonal variations in the location of sunrise and sunset should require that 'sunrise' and 'sunset' be able to move independently of each other as well as the triangles represerting the 'winds' (compass points). For Mesopotamian sundials and gnomons, see most recently Hunger-Pingree Mul-Apin 153-54; F. Rochberg-Halton, Centaurus 32 162-65. The author is grateful to Mr. Avraham Avitzour for his advice on the matter of ancient sundials. Mr. Avitzour and the author are at present preparing a more detailed study of BagM. Beih. 2 98.

¹⁵ For previous discussion of the wind-names in Nos. 4–5, see BagM Beih. 2 pp. 20–21; J. Oelsner, Materialien zur Babylonischen Gesellschaft und Kultur in Hellenistischer Zeit (1986) 432 n. 666; J. McEwan, BiOr 38 641. AHw 1590 šeššektu reads šār ši-ši-ik-tu₄ for No. 4 and identifies this passage with the word še/išše/iktu (AHw 1220).

¹⁶ For additional examples of this system, see CT 39 38 rev. 3-6 (Šumma Alu);

A. Sachs, JCS 6 146: 4'-5'; CAD A/2 92-93 amurru.

¹⁷ See Wind Tables for June, July, and August in *Climatological Atlas for Iraq* (Republic of Iraq, Meteorological Department, Climatology Section) Publication No. 13 pp. 191–99.

18 J. Oclsner in Materialien zur Babylonischen Gesellschaft und Kultur in Helle-

nistischer Zeit (1986) 432 n. 666 reads mza.qi[q!].

The wind name for the Spring (no. 4), although complete, presents greater difficulties. There are two ways to understand the name. First Ši.Ši.IK.TUM may be understood as a single word. An Akkadian word šiššiktu is known but only occurs as a name for a stone or as a topographic term (see AHw 1220). Other possible explanations of the word include a reading šār abiktim(ši.ši)^{ik-tim} ('Wind of Destruction'), or a reading SI₁₇.SI₁₇.IC^{tim}.¹⁹ Lexical evidence connecting sissig with winds is found in parallel passages in Urra II and Izi M:

```
'wind'
sìg.sìg
             = šá-a-ru
             = me-hu-ú
sig.sig
                                         'storm wind'
             = za-qí-qu
                                         'breeze'
sìg.sìg
sìg.sìg
             = šá-qum-ma-tum
                                         'stillness'
sìg.sìg
             = šá-hur-ra-tum
                                         'stillness'
                                 Urra II 306-10 (MSL 5 74-75)
             = \delta a - hur - r[a - tu]
                                         'stillness'
s i.si.ig
fsil.si.ig
             = zi - qi - q[u]
                                         'breeze'
si.si.iq
             = \dot{s}u \cdot uh \cdot ra \cdot tu
                                         'stillness'
                                    Izi M ii 6'-8' (MSL 13 216)
```

If <code>SLSLIK</code> can be accepted as a phonetic writing for <code>sissig</code>, then the wind name in BagM Beih. 2 no. 98 could be this word with a feminine ending (<code>SISSIG'tum</code>). If <code>so</code>, <code>šaqummatum</code> and <code>šahurratum</code> 'still wind' are possible readings, and this might indicate that there was little or no wind during the Spring season. However, Spring winds in Iraq are not noticeably weaker than the winds of other seasons. ²⁰

The second possible interpretation of the wind name for Summer also depends on a reading $SI_{17}.SI_{17}$ for ŠI.ŠI. In the Boghazkoi version of a "Prayer to the Gods of the Night" (KUB 4 47 rev. 42), the name of the north wind is written $SI_{17}.SI_{17}$, which apparently is a substitute for the regular Sumerian writing $si.s\acute{a}$ (see G. Meier, ZA 45 197-98). Thus $SI_{17}.SI_{17}$ alone could be a name for the north wind, and IG.TUM could represent an adjective. During the months of March, April, and May, true north winds are common in southern Iraq, ²¹ but these north winds become less frequent during the Summer. Hence, the prevailing northwest wind of Mesopotamia could be thought of as a north wind during the Spring and west wind during the Summer. Unfortunately, no adjective ig/klq-tum or eg/klq-tum is appropriate for winds. A reading $g\acute{a}l$ -tum 'terrifying' is possible, but no other example of this word being written with $g\acute{a}l$ instead of

 $^{^{19}}$ For the reading šī.šī = $si_{17}.si_{17}$, see A. Goetze, JCS 11 97; cf. J. McEwan, BiOr 38 641. Note also GHT 243, where Sumerian sī.sī.ig. (ni) parallels $zaq\bar{\imath}qu$ Gilg, XII 84, and ACh Adad 33:23, where $ziq\bar{\imath}qu$ is identified with the north wind. A loanword ziqziqqu/siqsiqqu is equated with $\bar{s}aru$ wind in a list of synonymns of $\bar{s}aru$ in Malku III (CT 18 21 K.11191+ i 3-4 + duplicates; see CAD Z 134). For šī.šī = abiktum see CAD A/1 52-53 abiktu. It is likely that the diri-compound šī.šī is to be read bad_5.bad_5 when equated with abiktu, by analogy with bad_5.bad_5 = $dabd\hat{u}$ (see CAD D 14 $dabd\hat{u}$). The homonym CAD S 322 sissiktu (zizziktu, šiššiktu) 'fringe, edge, hem of a garment' can hardly be associated with winds.

²⁰ Climatological Atlas for Iraq, pp. 182-90.

²¹ Ibid.

ordinary gal is known, and there is no evidence that the winds of Summer were particularly dangerous. Thus the identity of the wind name for the Spring season seems even less certain than that of Summer.

The Area beyond the Circle

It is conceivable that the cosmic ocean lies beyond the circle preserved on BagM Beih. 2 98, because the traces in no. 6 may be interpreted as the remains of the diri-compound fD(= A.ENGUR). On *The Babylonian Map of the World*, the cosmic ocean is identified as the ^{id}marratu, and this ocean flows beyond a circle marking the border of the known world. If the area beyond the circle in BagM Beih. 2 98 is also the cosmic ocean, then the relationship between this ocean and the winds may be important. In a Sumerian incantation, disease-bearing winds blow from the Upper and Lower Seas:

IM ^[sag].ba ^[im.da.ta.dal] a.ab.ba sig.ga.ta im.da.t[a.d]al a.ab.ba ig[i]. ^[inim].ta im.da.ta.dal ^[an.úr].ta du.a.ni šà.gig im.túm libiš.gig im.túm

OECT 5 23:1-5

The wind blew to the fore.

From the Lower Sea, it blew forth.

From the Upper Sea, it blew forth.

As it came from the Horizon,
it brought heart-disease, brought heart-sickness.

Winds blowing from Upper and Lower Seas could be the prevailing northwest and southeast winds of Mesopotamia, because the Upper Sea (Mediterranean) is located north/northwest of Assyria and Babylonia and the Lower Sea (Persian Gulf) is located southeast of Babylonia. However, the triangles labeled 'South wind' and 'West wind' on BagM Beih. 2 98 are placed well within the circle that may mark the shores of the cosmic sea.

Interpretation of the Diagram

The Square

Despite the difficulties outlined above, the diagram on BabM Beih. 2 98 does seem to illustrate a number of important Mesopotamian cosmographic traditions. The placement of triangles labeled 'South wind' and 'West wind' in the corners of the square seems to illustrate the tradition of the *kibrāt arba*⁻*i* 'four regions' in which heaven and the earth's surface are divided into northern, southern, eastern, and western quarters.

The 'four regions' of the earth's surface are well known from historical inscriptions and literary texts, where the 'four regions' comprise the entire earth's

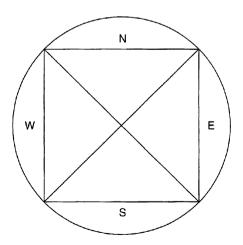
surface.²² The 'four regions' of heaven are less well known but are mentioned in connection with winds, atmospheric phenomena, and stars in astronomical omens and reports where various phenomena are located in the northern, southern, eastern, and western quarters of the sky. Examples include Mul-Apin II i 68–71 (see p. 198), which correlates the four winds with constellations; Prayers to The Gods of the Night, which mention the stars of the four winds;²³ and a passage in Šurpu that connects the four quarters of the sky with both stars and winds and speaks of the stars of the 'four winds' in conjunction with the 'seven winds':

kakkabānu^{meš} ^{IM}šūti (ù l u) lu ^{IM}iltāni (si.sá) ^{IM}šadî (k ur.ra) ^{IM}amurri (m ar.d ú) šārū ^{meš} si-bit-ti li-zi-qu-nim-ma li-paṭ-ṭi-ru ma-mil-su

Šurpu 17:165–67

May the stars of the south wind, north wind, east wind, and west wind, the seven winds, blow upon him and let them release his oath.

The placement of the triangles representing the winds in the corners of the square, at an angle of 45° to a line drawn though 'Sunrise', suggests that the four quarters were divided so as to create four equal triangles rather than four equal squares:



²² See further examples and discussion, p. 259.

 $^{^{23}}$ See KUB 4 47 rev. 42 (ka_4 -ak- ka_4 -ak-)[text ad] $^{\text{tù mu}}$ ul.la $^{\text{tu}}$ II. $^{\text{tù mu}}$ ku.u.ra $^{\text{tù mu}}$ gar₁₄-du; cf. G. Meier, ZA 45 197–98); A. Oppenheim, AnBi 12 283:40; OECT 6 pl. 12 K. 3507 16′ (OECT 6 75). Note also KAR 214 iii 26–27 (Frankena Takultu 26).

This geometric figure, which may have illustrated the geographic tradition of the 'four regions', occurs on mathematical tablets (MCT 42-43, 141; MDP 34 pl. 1; cf. H. Saggs, RA 54 132).

The Circle

The circle surrounding the square seems to illustrate another Mesopotamian cosmographic concept. This circle, which encloses the square of the winds, suggests that the winds blew in a circular region, just as the circular shape of the planisphere (CT 33 10) and circular "Astrolabes" (CT 33 11–12) suggest that the level of the stars and the earth's surface were also conceived as circles. ²⁴ Further evidence for the circular shape of the region of the winds is found in a Shalmaneser III inscription, where the weather-god Adad holds the *kippat šārē* 'circle of the winds' (J. Kinnier Wilson, Iraq 24 93:4), and in *The Tukulti-Ninurta Epic*, where Tukulti-Ninurta inspires fear among the kings of *kippat šār erbetti* 'circle of the four winds' (Machinist TN Epic 60 IA 13'; cf. 116 A v 17). ²⁵

BagM. Beih. 2 No. 98 as an "Ancient Compass"

Evidence in BagM. Beih. 2 no. 98 suggests that the tablet diagrams a device that was used to identify the directions of the compass, as defined in ancient Mesopotamaia. Two of the three indicators of compass-point directions used in Mesopotamia (the sun and winds) are represented on the tablet by the positions of sunrise and sunset and the origins of the winds. These two compass-point directions apparently are correlated with the seasons of the year and the type of wind characteristic of each season. This is significant, because the locations of sunrise and sunset and the frequencies of winds vary over the course of the year. Furthermore, the apparent impossible placement of 'sunrise' on the tablet opens the possibility, at least, that 'sunrise' and 'sunset' could have been moved to more appropriate positions on a moveable device that may have included some elements of a sundial. The user of such a device might have been able to correlate wind direction with the location of the sun and time of year in order to determine the compass-point directions. Such a device would have been very useful, since the only attested method for determining the four compass points (that of Mul-Apin II i 68-71, which utilizes the positions of constellations) can

Note also Weidner TN 8:5: kippat tubuqāt erbetti 'The Circle of the Four Corners'; and Erra 1 36: ... kīma šāri zī [q]ma kippata hīṭa 'Blow like the wind, survey the circle'.

²⁴ For the 'circle of the heavens/night skies' (kippat šamē, burūmē, soc pp. 264-65). The planisphere CT 33 10 (= Koch Neue Untersuchungen 56) preserves eight sectors marked off by dividing lines drawn 45° apart, just as 'sunrise' and 'sunset' are inscribed 45° away from the triangles representing the winds on BagM. Beih. 2 98. However, BagM Beih. 2 98 lacks a label in the space between 'West wind' (no. 3) and '[North wind]' (no. 9), which might indicate that that circle on this fragment also was to be divided into eight 45° sectors.

only be used at night. Nevertheless, the evidence cited above does not prove that BagM. Beih. 2 no. 98 diagrammed an "ancient compass," because it is unclear how such a device would work and the text is too broken to allow for any final conclusions. Thus all hypotheses deduced from the surviving fragment must remain only hypotheses pending the discovery of a more complete duplicate or missing fragments that can be joined to BagM. Beih. 2 no. 98.

"Seven Heavens and Seven Earths": an.7 ki.7, an.7.bi ki.7.bi, an.7.ki.7.bi.da

A number of Sumerian incantations may preserve a Sumerian cosmographic tradition of seven heavens (an) and seven earths (ki) that can be compared to the three heavens and earths of the Akkadian mystical-religious text KAR 307 30–38:

- Editions of the incantation me.šè ba.da.dal preserve the phrase an.7 ki.7.
- 2. Editions of the incantation hé.daddag.ge an den.líl den.ki dnerigal preserve the phrase an.7.bi ki.7.bi.
- 3. The medical incantation AMT 103 8-12 preserves the phrase an.7.bi ki.7.bi.da.
- A number of incantations preserve chains of seven or more an and ki signs.

It is not clear, however, from the context of these incantations how the phrases with an and ki are to be understood. It is possible that these phrases refer to seven superimposed levels of heaven and earth that are invoked to rid the supplicant of disease. Versions of both me.šè ba.da.dal and hé.daddag.ge an den.líl den.ki dnerigal, as well as AMT 103:8-12, preserve the exorcism formula zi.an.na hé.pà zi.ki.a hé.pà be exorcised by heaven, be exorcised by earth'. Other zi-exorcism and lipšur formulas invoke cosmographic features, including heaven, earth, winds, mountains, and rivers. Nevertheless, it is also possible that the phrases were meant to refer to demons that afflict the supplicant, rather than heavens and earths that may help cure the supplicant. In a

¹ For editions of zi formulas, see E. Ebeling, ArOr 21 357–403. For Lipšur-litanies invoking the mountains and rivers listed in Urra XXII (MSL 11 23–28), see E. Reiner, JNES 15 132–135. See also YOS 11 p. 22 12; CAD Š/2 135 b.

bilingual incantation from Utukku-Lemnutu V, a similar phrase an.7.àm ki.7.àm occurs in the context of disease-spreading *lamaštu*-demons in heaven and earth:

- 13. 7.àm dingir an.dagal.la.meš
- 14. si-bit ilānu^{meš} šamê^e rap-šu-ti
- 15. 7.àm dingir.kalam.ma.dagal.la.meš
- 16. si-bit ilānu^{meš} ma-a-ti ra-ap-áš-ti
- 17. 7.àm dingir ur₄.ur₄.re.a.meš : si-bit ilānu^{meš} maš-ši->-ú-ti
 - 18. 7.àm dingir 7.àm.meš: si-hit ilānumeš kiš-šá-ti
 - 19. 7.àm dingir.hul.a.meš
 - si-bit ilānu^{meš} lem-nu-tu₄
 - 21. 7.àm ddìm.me.hul.a.meš
- 22. si-bit la-maš-ti lem-nu-tu₄
- 23. 7.àm ^ddìm.me.a šed₇.dè.hul.a.meš
- 24. si-bit la-maš-tu₄ li->-bu lem-nu-tu₄
- 25. an. 7. àm ki. 7. àm
- 26. ina šamê* si-bit ina ersetim^{tim} si-bit-ma
- 27. udug.hul a.lá.hul gidim.hul gal₅.lá.hul dingir.hul maškim.hul
- 28. zi.an.na hé.pà zi.ki.a hé.pà

CT 16 13 iii 13-14 iii 28

- 13. Seven gods of the broad heavens.
- 15. Seven gods of the broad land.
- 17. Seven robber gods.
- 18. Seven gods, all.
- 19. Seven evil gods.
- 21. Seven evil lamaštu-demons.
- 23. Seven evil infectious lamaštu-demons.
- 25. Heaven seven, earth seven.
- 26. [Akkadian] In heaven seven, in earth seven.
- 27. O evil demon, evil devil, evil ghost, evil ghoul, evil god, evil prowler;
- 28. be exercised by heaven, be exercised by earth.

Here, the phrase an.7.àm ki.7.àm = ina šamê sibit ina erşetim sibit follows descriptions of seven evil demons in lines 13-24 and precedes the exorcism of these demons in lines 27-28. Thus, it is not certain if an.7.àm ki.7.àm = ina šamê sibit ina erşetim sibit refers to the demons themselves or heaven(s) and earth(s) meant to exorcise the demons. This incantation and others, as well as

possible interpretations of the phrases an. 7 ki. 7, an. 7. bi ki. 7. bi and an. 7. bi ki. 7. bi da, are examined below.

The Incantation me.šè ba.da.dal

The incantion me.šè ba.da.dal is known from eight exemplars: two namburbi duplicates, three medical tablets, and three unidentified fragments. An extract of the incantation, beginning with the phrase an.7 ki.7, is included in the Akkadian Utukku-Lemnutu/Enuru incantation CT 51 142 without translation from Sumerian, and a short version of the incantation occurs in SpTU III 83:15–16. A related incantation that opens an.7 u_4 .7 (seven heavens, seven storms) is found in CT 44 83 iii 5'-9':

Exemplars of me.šè ba.da.dal

Exemplar	Copy/Photo	Identification
A. KAR 20 ii 2'-8'	_	Namburbi ²
B. K. 157+ 2'-5'	OrNS 40 300 taf. III-IV	Namburbi
C. BAM 508 iv 11′-17′	_	Medical Text
D. K. 2542+ ii 37'-42'	Plate 8 ³	Medical Text
E. K. 9329+ b 5'-8'	Plate 10	Medical Text
F. BM 50958 a 3'-11'	Plate 10	Unidentified
G. BM 17311 ii 6'-13'	Plate 10	Unidentified
H. Sm. 1802 ii 2'-3'	Plate 10	Unidentified
Related Texts		
1. CT 51 142 2-8	_	Utukku-Lemnutu /Enuru
2. SpTU III 83:15–16	_	Short Version of me.šè ba.da.dal
3. CT 44 33 iii 5′-9′	_	an.7 u ₄ .7

A number of different versions of me.šè ba.da.dal circulated in antiquity. A composite version of the incantation is presented below, with a discussion of the more important variants following. A transliteration of each example of the incantation is found in Appendix A (pp. 363–65):

 ÉN me.šè ba.da.dal ki.šè ba.da.zah me.šè gub.ba igi.mu nu.gub
 an 7 ki 7 IM 7 IM.gal 7

² For KAR 20/K. 157+, see R. Caplice, OrNs 40 140-47.

³ To be copied in a forthcoming volume of BAM (cf. Af0 21 19 n. 47). An old copy of the incantation is available in BE 31 60 ii 18'-23'.

izi 7 igi 7 bar 7 bar.ta.7 bar.ta.igi.7 zi.an.na hé.pà zi.ki.a hé.pà

- 5. mušen.an.gim ha.ba.dal.en i.bí.gim an.na ha.ba.e₁₁.dè muru₉.gim ki.a ha.ba.ni.in.šub tu₆.du₁₁.ga en.gal ^den.ki eridu⁶.ga.ke₄ nam.mu.un.da.an.búr.ra Tu₂.èN
- Incantation: Where has it flown? It has escaped to earth.
 Where is it standing? Before me it does not stand.
 O "seven heavens," "seven earths," "seven winds," "seven great winds."

"seven fires," "seven fronts," "seven backs," "seven sides," seven ... Be exorcised by heaven, be exorcised by earth.

Like a bird of heaven may you fly away. Like smoke may you go up into heaven.

Like a cloud may you fall on earth.

Let the spoken incantation of the Great-Lord, Enki
of Eridu not be undone.

Most of the variants between versions of me.šè ba.da.dal are minor. These include the omission of bar.ta. 7 in BAM 508 iv 12, the omission of bar.ta. igi.7 in BM 17811 7′, and the insertion of the verbal-prefix ši in K.2542+ ii 37′, resulting in the incipit reading me.šè ba.da.ši.dal. Other variants, however, are of greater consequence. BM 50958 a 4′ preserves igi.na nu.gub 'before him it does not stand' instead of igi.mu nu.gub 'before me it does not stand', while K.2542+ ii 38′, on the other hand, apparently omits this phrase altogether. Second, BM 50958 a 3′ opens [ÉN me.šè ba.d]a.ra. Here, ra may or may not be a phonetic variant of DAL/RI = naprušu 'to fly'.

The incipit me.šè ba.da.dal is also found in medical texts where the recitation of the incantation is required but the full text is not provided,⁶ and in a list of medical and $Mu\check{s}\check{s}u^2u$ incipits (F. Kocher, AfO 21 17:19, 22, 26). Thus additional examples of the incantation may come to light as more exemplars of $Mu\check{s}\check{s}u^2u$ are identified. The verbal chain ba.da.ši.dal is only found in K.2542+ ii 37' at the start of the incantation and in incipits in K.2542+ ii 30 and 35.

The medical applications of two occurrences of the incantation are known. In K 2542+ the incantation is recited to alleviate paralysis (*šimmatu*). In BAM 508, the incantation is recited into the right ear of a patient to relieve 'buzzing of the ear':⁷

⁴ Between me and gub.ba in K.2542+ ii 38 there is room for as many as five very closely written signs, so a restoration such as m[c.šè gub.ba igi nu.g]ub.ba is possible, though unlikely.

⁵ Both readings dal (da-al) and ri (ri-i) occur in lexical lists (see CAD N/1 314). Further evidence for dal is found in bilingual texts, where dal is resumed by Ia (LKU 14 ii 13, 15; SBH 54 rev. 23).

K.2542+ iii 5, iv 7//BAM 854 iv 6, 17 (see BAM IV p. xiv-xv); K.3274 5′, 12′, rev. 13′.
 For this medical condition, see CAD Š/1 64 šagāmu 2; Parpola LAS 2 p. 250.

ka-inim-ma šumma amēlu(na) uznē^I[¹-šu i-šag-gu-ma] 3-šú a-na uzni imitti(15)-šú [tamannu(šid)^{nu}]

BAM 508 iv 26-27

Incantation; if a man's ear[s buzz,]
three times into his right car [vou recite it.]

The Incantation bé.daddag.ge an den.líl den.ki dnerigal

The incantantation hé.daddag.ge an den.líl den.ki dnerigal preserves the phrase an.7.bi ki.7.bi. Like me.šè ba.da.dal, more than one version of the incantation has survived. The incantation is known from the Old Babylonian lamaštu-tablet TIM 9 63//OECT 5 55 (M. Tonietti, Or 48 304-5) and a number of amulets but was apparently not included in the main lamaštu series, because no other known lamaštu-tablet preserves the incantation. The most complete version of the incantantion, that of the lamaštu-tablet TIM 9 63, is presented below. Transliterations of the other examples of the incantation are found in Appendix B (pp. 366-67).

- 6'. hé.daddag.ge an den.líl den.ki dnerigal
- 7'. an.7.bi ki.7.bi en.7.bi su.7.bi
- 8'. en.na lú.ú dumu.dingir.ra.na na.an.ga.ti.la
- 9'. ú ba.ra.da.guz.e a ba.ra.da.nag.nag
- 10'. gišgu.za [ba].ra.da.tuš giš.nú ba.ra.da.nú
- 11', gišgu.za ba.ra.da.tuš.ù.dè
- 12′. gišnú ba.ra.da.nú.ù.de
- 18′. gišhanšur a.a.zu den.líl.lá.(([zu])) šu.zu ba.ra.bí.in.te
- 14'. ddìm.me zi.an.na hé.pà zi.ki.a hé.p[à]
- 15'. zi dingir.gal.e.ne bé.pà
- 16'. ka.inim.ma ddim.me

TIM 9 63:6-16

- 6'. Cleanse him O Anu, Enlil, Enki, Nergal,
- 7'. "seven heavens," "seven carths," "seven lords?", "seven bodies?".
- 8'. Until the man, the son of his god, lives,9
- 9'. May you not eat food, may you not drink water.
- 10'. May you not sit on a chair, may you not lie in bed.
- 11'. May you not be allowed to sit in a chair.
- 12'. May you not be allowed to lie in bed.
- ⁸ The incantation hé.daddag.ge an den.líl den.ki dherigal is not included in the list of lamaštu-incantations in 4R² 55 no. 1 rev. 1-19. In the amulets, the names of the four gods occur in the line below hé.daddag.ge, so this first word alone may be the ancient title of the incantation.
- 9 The verbal chain na.an.ga.ti.la is understood as: na (affirmative) + i $\tilde{g}a$ + a + BASE + a (subjunctive). The sense of 'until' is derived from conjugation ia with subjunctive a. See M. Tonietti, OrNS 48 313 8'.

- 13'. May your hand not touch the table of your father, Enlil.
- 14'. O Lamaštu, be exorcised by heaven, be exorcised by earth.
- 15'. Be exorcised by the Great Gods.
- 16'. A Lamaštu-incantation.¹⁰

The amulet YOS 11 89 preserves a version of the incantantion that includes both the phrase an.ki.7!.bi (seven heavens and earths), as well as an.7.bi ki.7.bi (YOS 11 89:3, 7; see Appendix C, no. 2).

The Gods in TIM 9 63 6'

In TIM 9 63 6' four gods are invoked in sequence at the start of the incantation: An, Enlil, Enki, and Nergal. These gods are leading gods of their cosmic regions. In the Sumerian pantheon, An is the king of heaven, Enlil is the king of the earth's surface, and Enki is the king of the Apsu. The god Nergal obtains the kingship of the underworld by marrying the Sumerian queen of this region, Ereškigal, in the Akkadian epic Nergal and Ereškigal. Although the earliest copy of this cpic is from the Amarna Period (EA 357), Nergal is already sovereign in the underworld as early as the Ur III-period Sumerian literary work The Death of Ur-Nammu: 11

dnerigal den.líl kur.ra.ra sipa ur.dnammu.ke₄ é.gal.a.na giš im.ma.ab.tag.ge S. Kramer, JCS 21 114:89-90

To Nergal, the "Enlil of the Underworld," the shepherd Ur-Nammu offers a sacrifice in his palace.

Hence, the four gods in the incantation are listed in descending order according to the location of their cosmic kingdoms.

Cosmic Region	God	
Heaven	An	
Earth's Surface	Enlil	
Λpsu	Enki	
Underworld	Nergal	

¹¹ For Nergal as King of the Underworld before the Kassite period, see AOAT 11 14-15; W. G. Lambert, BiOr 30 356.

¹⁰ For ^ddim.me = *lamaštu*, see CAD I. 66 *lamaštu* lexical and bilingual sections. For a bilingual parallel to TIM 9 63 8-13, see CT 16 11 v 56-62. The second-person pronominal suffix zu in TIM 9 63:13 demonstrates that the verbs with prefix bára in lines 9'-13' must be second person.

The Incantation an.7.bi ki.7.bi.da

AMT 103, an exemplar of the third tablet of the medical series UGU (see HKL 2 284) preserves an incantation that apparently opens with the words 'seven heavens and seven earths':

ÉN an.7.bi ki.[7.b]i.da hé.7.bi dutu nam.tar.ra
n[a]m.ba.luh.k[ù.g]a u.me.luh nam.mu.un.da.a.búr.ra
nam.mu.un.da.a.lá.e:
al.li ma.da ma.da.bi den.ki lugal abzu.ke4:
dasal.lú.hi dumu.eriduki.ga.ke4 nam.mu.un.da.an.búr.re:
zi an.na hé.pà zi ki.a hé.pà

AMT 103 8-12

Incantation: Seven heavens and [seven] earths, seven firmaments,

O Utu who determines the destinies.

May you make binding the absolution when one washes with pure wash. Land by land O Enki, king of the Apsu,

Asalluhi, son of Eridu, may you absolve.

Be exorcised by heaven, be exorcised by earth.

In the incantation, an.7.bi ki.7.bi.da appears as part of an opening chain of cosmographic terms. Utu is the Sumerian sun-god and hé.7.bi may be identified with the sky, because the Sumerian element hé appears in Sumerian equivalents of Akkadian *šupuk šamê* 'firmament, sky' (see pp. 240-41). Although this context suggests that 'seven heavens and seven earths' may be 14 cosmic regions, the editor of UGU may have understood an.7.bi ki.7.bi.da as 14 demons in heaven and earth, because 14 statuettes are used in the ritual accompanying the incantation (see AMT 103:14).

Incantations with Seven AN Signs

Incantations beginning with seven AN signs may be related to the phrases an.7 and an.7.bi. In various versions of the incantation ANANANANANANANANANAN is an may be understood as the Sumerian name for heaven, and each individual AN sign may invoke one of seven heavens. In one such incantation, seven KI signs that may invoke seven earths follow seven AN signs:

ÉN en.ni.nu.na an.an.an.an.an.an ki.ki.ki.ki.ki.ki su.su.su.su.su bára.bára.bára.bára.bára.bára xxxxxxxx

¹² For related incantations, see M. Tonietti, OrNs 48 311–12. Note that NBC 3830 is YOS 11 66, not 64b. Compare also EA 355.

ninl.ninl.ninl.ninl.ninl.ninl.ninl ezen?.ezen?.ezen?.ezen?.ezen?.ezen?.ezen?.ezen?!

BIN 2 16 1-8

Another incantation opens with a string of nine AN signs (W. G. Lambert, Iraq 38 62 A), and the first two lines of the partially preserved incantation YOS 11 67 11–18 preserves room for at least nine AN and KI signs. Nonetheless, the mere repetition of AN and KI signs does not prove the existence of seven, nine, or more heavens and earths. In Maqlu I 37, for example, *erṣetu* is repeated three times in an invocation of the underworld. This invocation in no way proves the existence of three underworlds.

The Lists Beginning an.7 ki.7 and an.7.bi ki.7.bi

Both me.šè ba.da.dal and hé.daddag.ge an den.líl den.ki dnerigal list a number of items after an and ki. The former lists winds (IM), great winds (IM,gal), and fires (izi), followed by igi, bar, bar.ta, and bar.ta.igi. The surviving examples of the latter incantation list six items in addition to en and su, which appear in TIM 9 63. These are du_6 (hills), zà (sides), gaba (chests), bára (daises), hal (crotches), and bar (backs). It is likely, however, that the priests who recited the incantations did not fully understand the meaning of the lists beginning with an and ki. In the Akkadian Utukku-Lemnutu incantation CT 51 142, the extract from me.šè ba.da.dal beginning an.7 ki.7 is not translated from Sumerian into Akkadian. This suggests that the list here was recited as a magical "hocus-pocus" formula. 14

Non-Cosmographic Items in the Lists

Many of the items listed after an and ki are not cosmographic features. For instance, the last four items listed in me.šè ba.da.dal (igi, bar, bar.ta, bar.ta.igi) may refer to demons surrounding the supplicant. In Sumerian literary texts, igi and bar occur together in contexts where they refer to the front and back of human beings and gods. For example, in *Inanna's Descent*, demons guard Inanna at the front, back, and sides of the goddess when she is allowed to leave the underworld in search of a substitute: 15

¹⁸ The sign in BIN 2 16:6 also occurs in W. G. Lambert, Iraq 88 62:3 and PBS 18 38 2–3. M. Tonietti (OrNS 48 311–12) reads the sign udug. If udug is the correct reading, then BIN 2 16:6 apparently refers to seven demons; cf. OrNS 48 310 n. 21. The "boxes" of the nin and czen signs in line 8 are uninscribed in the copy. The ezen sign might therefore be read bad or represent any of the EZEN×X group of signs.

¹⁴ For the possibility of Elamite personal names recited as "magical mumbo-jumbo" in versions of ANANANANANANAN, see W. G. Lambert, RA 77 94-95. See also W. Farber. Schlaf, Kindchen, Schlaf! 144-45.

¹⁵ For these meanings of igi and bar, see PSD B 93 bar A 1.2 and note the bilingual passage in *The Blessing of Nissaba* (W. Hallo, Rencontre Assyriologique 17 125 vii 44) where bar corresponds to *warku* 'back'. See also B. Alster, Dumuzi's Dream p. 95 and Sladek ID pp. 216–17.

lú igi.na sukkal nu.me.a ^{gis}gidri šu bí.in.du₈ bar.ra.na ra.gaba nu.me.a ^{gis}tukul úr.ra bi.in.lá gal₅.lá.tur.tur gi.šukur.gim gal₅.lá.gal.gal gi.dub.ba.an.na.gim zà.ga.na ba.an.dab₅.be.eš

Sladek I.D. 139:291-140:294

The one at her front was not a vizier, he held a scepter.
The one at her back was not a courier, he carried a mace at his thigh.
The small demons like a reed hut,
the large demons like reed fencing clung to her side.

This suggests that igi.7 and bar.7 in me.šè ba.da.dal may refer to demons that go in front of and behind the supplicant. Similarly, bar.ta.7 can refer to the demons at the sides of the supplicant, since bar.ta, like zà, is equated with ahu ('arm, side') in bilingual texts such as SBH no. 67:¹⁶

... érim.dò.èm bar.ta ba.da.gub.be.[en] ... ki-ma a-a-bi a-hi-i ta-az-zi-[iz]

SBH p. 119 no. 67 rev. 7-8

Like an enemy you stand at the side.

Thus the chain igi. 7 bar. 7 bar. 1a. 7 may be translated 'they are seven (demons) at the front, they are seven (demons) at the back, they are seven (demons) at the side'. The final phrase bar. 1a. igi. 7 is not attested elsewhere, but may be a compound of bar. 1a and igi meaning 'front-side'.

Most of the items listed in hé.daddag.ge an den.líl den.ki dnerigal seem to refer to parts of the body afflicted by the *lamaštu*-demons. For instance, TIM 9 63 itself preserves the phrase su.7.bi (seven bodies), and other versions of the incantation list zà ('sides'), gaba ('chests'), hal ('crotches'), and bar ('backs'). Thus both an.7 ki.7 and an.7.bi ki.7.bi may refer to demons that originated in heaven and earth, but later came to surround the supplicant, or invade his body.

Interpretations of an.7 ki.7, an.7.bi ki.7.bi, an.7.bi ki.7.bi.da

There are at least three possible interpretations of an.7 ki.7, an.7.bi ki.7.bi, and an.7.bi ki.7.bi.da. First, the phrases could be understood literally as referring to 14 separate cosmic regions. Second, they may be taken figuratively to mean 'all of heaven and all of earth' or 'all heavens and earths', because the numeral seven is sometimes translated from Sumerian into Akkadian as kiššatu 'all, entirety' (see CAD K 457). Third, the phrases can be understood to refer to demons in heaven and earth.

1. Seven Superimposed Heavens and Earths. It is conceivable that the incantations preserve a Sumerian tradition of seven superimposed levels of

 $^{^{16}}$ For bar.ta and bar.ta.bi.šè corresponding to $a\hbar u$ 'side', see PSD B 103–4 bar A Bil. 4–5.

heaven and earth that can be compared to the three superimposed heavens and earths of KAR $307\ 30-38$.

A tradition of seven heavens and seven earths was popular in the Near East during the later part of the first millennium B.C.E. and the first millennium C.E. Surviving Hebrew and Arabic texts from this time present cosmographies in which seven heavens and earths are explained in detail. For example, the Hebrew Book of Enoch speaks of seven superimposed heavens belonging to the seven archangels. In Enoch, these heavens rise above the spheres of the sun, moon, stars, and planets. The Koran similarly speaks of seven heavens in Sura 65 verse 12 and Sura 78 verse 12. The earlier verse also alludes to the existence of seven analogous earths: 18

It is Allah who created the seven heavens: and concerning the earth, (it is) similar to them.

There is, however, no evidence to prove a direct connection between these later Hebrew and Arabic cosmographies and a possible Sumerian tradition of seven heavens and earths.

Despite the absence of direct evidence for seven superimposed heavens and earths in Sumerian and Akkadian texts, indirect evidence for understanding an.7 ki.7, an.7.bi ki.7.bi, and an.ki.7.bi.da as allusions to 14 cosmic regions is available. If the phrases in the incantations allude to multiple heavens and earths, then these incantations invoke the heavens and earths to cure a supplicant. Such invocations of cosmic regions do occur in a number of other incantations. For example, Maqlu 1 37 invokes *erşetu* 'earth' by repeating the cosmic place-name three times at the start of an incantation, and the medical incantation AMT 32/1 rev. 1–3 begins by invoking KUR *u* KUR.NU.GI₄.A 'earth and underworld' (see p. 278). Similarly, zi-formulas invoking tM.7.bi 'the seven winds' and an.ki.ub.da.límmu 'the four quarters of heaven and earth' (E. Ebeling, ArOr 21 397:77–78) can be compared with the formula zi.an.na hé.pà zi.ki.a hé.pà in the incantations me.šè ba.da.dal and hé.daddag.ge an den.líl den.ki dnerigal.¹⁹

Note also biblical parallels in Psalms 19:2; 24:7-10; 96:11-12.

¹⁷ For a general overview of Jewish cosmography, see L. Jacobs in Ancient Cosmologies 66-84, and for additional references to multiple heavens in Hebrew texts, see *The Jewish Encyclopedia* sub "heavens." See H. Odeberg, 3 *Enoch* Part II 46-48 for a list of angels belonging to each heaven.

¹⁸ For an overview of Islamic cosmography, see E. Jachimowicz in Ancient Cosmologies 143-71.

¹⁹ Note also further examples in n. 1 (p. 208). The powers of the underworld invoked in AMT 32/1 may be compared with the powers of the gates of the underworld to bless Kaka, the vizier of Anu, in *Nergal and Ereškigal* (O. R. Gurney, AnSt 10 108:19′) and the blessing of the doors of heaven in Abel-Winckler p. 59:1–6:

O Sun-god, when you enter "Heaven's Interior (an.šà)," may the bolt of the clear heavens say "hello."

May the doors of the heavens bless you. (See p. 248)

The grammatical structure of the phrase an.7.àm ki.7.àm in the Sumerian portion of CT 16 14 iii 25–26 (Utukku-Lemnutu V) also allows for a Sumerian tradition of seven heavens and earth, despite the Akkadian translation ina šamêe sibit ina ersetimtim sibitma 'in heaven seven, in earth seven'. In The Sumerian Flood Story, a parallel construction u_4 .7.àm gi_6 .7.àm refers to seven days and nights:

a.ma.ru ugu.KAB.dug₄.ga ba.an.da.ab.ùr.e u₄.7.àm gi₆.7.àm a.ma.ru kalam.ma ba.ùr.ra.ta

Sumerian Flood Story 202-4

The flood swept over the top of ...
The days were seven, the nights were seven.
After the flood swept over the land,

Thus, by comparison, Sumerian an. 7. am ki. 7. am in CT 16 14 iii 25 should be translated 'the heavens are seven, the earths are seven'. The Akkadian translation in CT 16 14 iii 26 is, in any case, problematic. The Sumerian line (iii 25) includes no locatives that correspond to ina in the Akkadian line (iii 26), while the structure of the terms an. 7. àm ki. 7. àm (noun + number + àm) follows a normal pattern for expressing plurality in Sumerian (see M. L. Thomsen, The Sumerian Language, 83 no. 140 [115], 276 no. 543). Furthermore, an.7.àm ki.7.àm occurs in iii 25-26 just before the exorcism of the lamaštu-demons by heaven and earth in iii 27-28. Thus, an. 7. am ki. 7. am may have invoked seven heavens and earths in the original Sumerian incantation, despite the Akkadian translation.20 If so, the author(s) of the original incantation, as well as those of me.šè ba.da.dal and hé.daddag.ge an den.líl den.ki dnerigal, may have known a cosmography based on seven heavens and earths that was no longer known, or not popular, when the bilingual edition of *Utukku-Lemnutu* was prepared. This might also explain why the author of the Akkadian Utukku-Lemnutu incantation CT 51 142 omits a translation of the Sumerian refrain beginning an. 7 ki. 7 altogether.

2. "All of Heaven and Earth, All Heavens and Earths." Even if an.7 ki.7 and an.7.bi ki.7.bi do indeed refer to cosmic regions rather than demons, it cannot be certain that there are exactly seven heavens and seven earths. As noted above, the numeral "7" in Sumerian texts is sometimes translated in Akkadian as kiššatu ('all, entirety'). Thus, it is possible that 'seven heavens, seven carths' in the Sumerian incantations edited above could refer to an unspecified number of heavens and earths that comprise the entire universe

²⁰ Sumerian forerunners to the bilingual *Utukku-Lemnutu* incantations are published by M. Geller in *Forerunners to UdugHul*, 1985.

²¹ See CT 16 13 iii 18 7.àm dingir 7.àm.meš = sibit ilanu kiššati; CAD K 457; Nabnitu 14 36 (MSL 16 135); Lu I 52 (MSL 12 94); Leichty Izbu 220:309 (Summa-Izbu Commentary); W. Schramm, OrNS 39 406:11-14.

or refer to heaven and earth in their entireties, just as pairs of an and ki signs in a Sumerian hymn to Inanna offer no proof that the universe consisted of exactly two heavens and earths:

nin an.an.šè ki.ki.šè nì.sášà.zu nì.gal a.ba.a mu.e.da.an.zu CT 36 34:16-17 (cf. CT 36 34:22; D. Foxvog, Fest. Hallo 104)

Lady throughout the heavens, throughout the earths, the matters of your heart are great. Who can comprehend you?

- 3. 'Seven Demons in Heaven and Earth.' The third possibility, that an.7 ki.7 and an.7.bi ki.7.bi refer to demons in heaven and earths, as noted earlier, is suggested by CT 16 14 iii 25-26 where Sumerian an.7.àm ki.7.àm 'heaven seven, earth seven' is translated into Akkadian as ina šamê° si-bit ina erşetim*im si-bit-ma 'In heaven they are seven, in earth they are seven':
 - 13. Seven gods of the broad heavens.
 - 15. Seven gods of the broad land.
 - 17. Seven robber gods.
 - 18. Seven gods, all.
 - 19. Seven evil gods.
 - 21. Seven evil lamaštu-demons.
 - 23. Seven evil infectious lamaštu-demons.
 - 25. Heaven seven, earth seven.
 - 26. (Akkadian) In heaven seven, in earth seven.
 - O evil demon, evil devil, evil ghost, evil ghoul, evil god, evil prowler;
 - 28. be exercised by heaven, be exercised by carth.

 CT 16 13 iii 13-14 iii 28 (Utukku-Lemnutu V; see p. 209)

Here an.7.àm ki.7.àm occurs in line 26 following seven lines of the incantation that speak of seven *lamaštu*-demons (13–24), but (as noted above) just before these demons are exorcised by heaven and earth in lines 27–28. In line 25, the Akkadian translator understands an.7.àm ki.7.àm to refer back to the seven demons although, as preserved, CT 16 14 iii 27 names only six demons.²² In TIM 9 63//OECT 5 55, an.7.bi ki.7.bi occurs in the invocation against *lamaštu*-demons in the incantation hé.daddag.ge an den.líl den.ki dnerigal. Further support for the identification of an.7 ki.7 with demons is found in AMT 103, where the recitation of an.7.bi.ki.7.bi.da is accompanied by a ritual

²² The six demons of CT 16 13 iii 27–28 also appear in sequence in Utukku-Lemnutu 10, followed by a number of additional demons (see J. Prosecky, ΛrOr 43 249:94—250:108). It is also possible that the winds, great winds, and even fires in me.šè ba.da. dal can also be identified with demons. Both the long *Utukku-Lemnutu* incantation *The Moon God and the Demons* (CT 16 19–21 + duplicates) and the *Utukku-Lemnutu* incantation that includes the phrase an.7.àm ki.7.àm (CT 16 13 ii 65–14 iii 38) refer to seven wind-demons and demonic-storms. Incantations against *išātu* ('fires' = fevers) have been published by W. G. Lambert in AfO 23 39–45.

using 14 figurines (see p. 214) and in CT 51 142, where a list of seven demons follows the refrain beginning a n.7 $\,$ ki.7:23

di-ú-um mu-ur-ṣum šu-ru-up-pu-ú ḥa-mi-ṭum e-ṭe-em-mu mu-ut-ta-ag-gi-šu ša-ag-ga-a-šu ša-ga-aš-ti ilānu lemnūtu(dingir.ḥul.a)^{meš} CT 51 142:4-6

Headache, Sickness, Cold, Inflammation,²⁴ Roaming Ghost, Murder, Murderess: evil gods.

Conclusions

The phrases an.7 ki.7, an.7.bi ki.7.bi and an.7.bi ki.7.bi.da in Sumerian incantations may or may not refer to seven superimposed heavens and earths. A tradition of seven heavens and earths does exist in later Hebrew and Arabic traditions, yet no surviving Mesopotamian text preserves a cosmos that includes more than three heavens and earths. Furthermore, the Akkadian translators of the bilingual *Utukku-Lemnutu* passage CT 16 14 iii 25–26 understood an.7.am ki.7.am to refer to seven demons in heaven and earth. Nonetheless, it is possible that a Sumerian tradition of seven heavens and earths, although such a tradition is never expressed in surviving Akkadian materials. A solution to this problem may await the discovery of Akkadian translations of the Sumerian incantations examined above.

²³ See CAD L 200 lippu b for the recitation of me.šè ba.da.dal in K. 2542/BAM 354 in conjunction with rituals employing seven lappu and riksu ('burls' and 'knots').

 $^{^{24}}$ The discase $h\bar{a}mitum$ is not found elsewhere but is apparently derived from the verb $ham\bar{a}tu$ 'to burn, to be inflamed', which does occur in medical texts (see CAD \upmathbb{H} 64 $ham\bar{a}tu$ B b).

Part II

The Regions of the Universe

Names for Heaven

an = <u>šamû</u>, <u>šamā</u>³ū, <u>šamā</u>mū

The most common names for 'heaven' in Sumerian and Akkadian texts are Sumerian an and Akkadian $\delta am\hat{u}.^1$ Both names are used in all periods and genres, and both appear as names for heaven as a whole, or for individual levels of heaven as in KAR 307 and AO 8196, where the three heavens are the $\delta am\hat{u}$ elûtu, $\delta am\hat{u}$ qahlûtu, and $\delta am\hat{u}$ $\delta am\hat{u}$ tu (upper, middle, and lower heavens).

Sumerian an is a singular noun. This name for heaven is also the Sumerian name for the king of the heavens, the god An. It occurs numerous times as a name for all of heaven in the cosmic pair an.ki ('heaven and earth'). Likewise, an is separated from ki in Sumerian accounts of the separation of heaven and earth (see pp. 135-42). There are also almost countless examples of an as a name for the sky where stars shine and birds fly, such as passages where stars are called mul.an.na ('star of heaven') and birds are called mušen.an.na ('bird of heaven').²

Akkadian šamû, unlike Sumerian an, is a plural noun. The name is a cognate of the most common names for heaven in other Semitic languages, including Arabic שׁמִים (šamaɔʾu), Aramaic שׁמִיה (šemaya), and Hebrew שׁמִים (šamayim). In Akkadian, the name for heaven occurs both in the contracted form šamû, as well as the uncontracted forms šamā¬ū and šamāmū. The contracted form šamû, originally *šamāwū, is by far the most common and is used

² For muše n.an.na, see, for example, Inanna and Enki 30:9; CT 38 20:70 (Namburbi); SCI, I 17:118. For mul.an.na see Fest, Kramer 88:49, 67 and CAD K 46

kakkabu. See also TCS III 138 n. 480, CAD Š/1 344-45.

¹ For lexical examples of an = šamû, see CAD Š/1 339-40; AHw 1160. For the name written ag, see Sulgi B 198 °C mul.ág.gá (C. Castellino, Two Shulgi Hymns 50-51). For a writing ša-mu-ma at Ugarit, see Ugaritica V 246:33″, 247:13; and cf. ša-mu-ma/ša-me-ma at El-Amarna (EA 211:17; 264:16). For unusual Sumerian plural writings an.an, see CT 36 34:16-17 (above, p. 219) and Racc. 129:17-130:18.

in all genres in all periods. Although the origins of šamû are unknown, a learned etymology is offered in the series Inamgišhuranki:

...] šamê (an)e ša mê(a)meš ...

CT 25 50:17 (Livingstone 32:6)

...] heaven: (composed) of water, ...

This explanation reflects a tradition that the heavens were fashioned from water. In Ee IV 137-46, for example, Marduk fashions the heavens from the watery corpse of Tiamat Another connection between the name of heaven and water is that a singular homonym šamû (šamûm with mimation) means 'rain'.

The uncontracted forms most often occur in literary texts, because $\S{am\hat{u}}$ cannot end a line of poetry. The two forms are popular in different periods. The form $\S{am\bar{a}}^\circ\bar{u}$ is popular in second-millennium literary works such as Old Babylonian Etana (Kinnier-Wilson Etana 30:13, 36:35), Old Babylonian Atra-hasis (Lambert-Millard Atra-hasis 94:48), and a passage in an Old Assyrian Lamaštu incantation:

a-nu-um a-bu-ša iš-tù ša-ma-e i-pu-șa-ší qá-qá-ar-šu-um

BIN 4 126:10-13

Anu, her father, cast her (lamaštu) down from heaven earthward.

The second form, $šamām\bar{u}$, is popular in the first millennium and is treated as a separate name for heaven in Malku, where $šamām\bar{u}$ is listed as a synonym for $šam\bar{u}$ (CT 18 10 iii 22). This form apparently retains the final consonant u, with w changing to m. An identical phenomena is found in the synonyms $m\bar{u}$ and $m\bar{u}m\bar{u}$ 'water' (see A. Rainey, Tel Aviv 3 131:1; W. G. Lambert, Fest. Reiner 192:63.4 Almost all examples of $šam\bar{u}m\bar{u}$ occur in literary works, incantations, or stock phrases such as such as 'star of heaven' ($kskkab \, šamel \, samel \, sam\bar{u}m\bar{u}$), 'bird of heaven' ($iss\bar{u}r \, samel \, sam\bar{u}m\bar{u}$), 'writing of heaven' ($istir \, samel \, sam\bar{u}m\bar{u}$) and $sam\bar{u}m\bar{u}u \, quaqamu \, heaven and earth'. Early examples of <math>sam\bar{u}m\bar{u}u \, occur$ in an Old Babylonian hymn to Ištar (VAS 10 213:6', 8', 10').

In addition to the numerous examples of the equation an = $šam\hat{u}$ in bilingual texts and lexical lists, an is equated with $a\check{s}ru$ in Commentary B to Enuma Elish (see J. Bottéro, Fest. Finklestein 13:135), and $\check{s}am\hat{u}$ is equated with a number of rare Sumerian names for heaven in lexical lists (these names are examined below, pp. 228–33). Three more Akkadian synonyms of $\check{s}am\hat{u}$ (bur $\hat{u}m\hat{u}$, $a\check{s}ru$, and ermi danim) are listed in Malku II (See CAD S/I 340).

³ Note also Thompson Gilg. 20:6; JRAS Cent. Suppl. (1924) 73:29; R. Nougayrol, RA 45 174:61; CH II: 31; C. Walker, AnSt 33 148:37, 39; Ludlul I 9,11; W. G. Lambert, Fest. Moran 293 LE with the note on p. 294; and cf. F. Al-Rawi, RA 86 79:9 ša-ma.

⁴ For the synonyms mēmū and māmū, see p. 62.

⁵ Note, for instance, Streek Asb. 258:33, 268:20; BAM 127:10; CT 16 43:70-71; CT 17 19:11-12; VAB 4 74:2, 86 ii 2; Erra I 127, 134; BBR II 98:41; Or 17 420:3 (= Ebeling Parfum Rez. pl. 49:3) with the writing AN-ma-mi. Note also the use of both samfi and samāmū in Ee IV 137-46.

andurunna 'Where Anu Dwells'

The term andurunna, literally 'Where Anu Dwells', occurs as a cosmic place-name in Enuma Elish, "An Address of Marduk to the Demons," and an incantation to Enmešarra. The meaning of the term is explained in a Balaghymn where andurunna occurs in a non-cosmic context:

ki an.dúr.ru.na.[šè] ú.mi.a mar.ma.an.zé.en a-šar ^da-nu-um [uš-ša-b]u ni-ši ḫi-šá-nu ki an.dúr.ru.na.šè ^da.nun.na ki an.dúr.ru.na.šè ú.mi.a mar.ma.an.zé.en SBH p. 44 rev. 33–36 (Cohen Balag 227–28)

O people, hurry to where Anu dwells. Anunna, (hurry) to where Anu dwells. O people, hurry to where Anu dwells.

Only in the incantation to Enmešarra is it certain that *andurunna* is a name for heaven. Here, *andurunna* is paired with the name for earth *ersetum*, just as another name for heaven, *ašru* is paired with the underworld name *kurnugû*:

bēl áš-ri u kur-nu-gi₄ šá-du-ú šá ^da-nun-na-ki pa-ri-is purussê(eš.bar) erṣetim^{tim} mar-kás rabû^á šá an-durun-na R. Borger, ZA 61 77:43-44

(Enmešarra) Lord of Heaven and Underworld, Mountain of the Anunnaki,

Determiner of the Destinies of Earth, Great Bond of andurunna.

In Ee I 23–24, the place-name occurs long before the heavens are built. In Λn Address of Marduk to the Demons B:5 (W. C. Lambert, AfO 17 313), the name occurs in the epithet of Marduk-Asalluḥi, $muma^5ir$ and urunna 'Commander of and urunna'.

The name andurunna also occurs in the series An = Anum as the name of an official of Anu (CT 24 2:11; see p. 109). Here the divine name may have been intended to be read ^ddurun.na.

<u>ašru</u> 'Place'

Akkadian *ašru* is a poetic name for heaven. The name occurs only in lexical lists and literary texts. In Malku II 100 (see CAD Š/1 340) and Commentary B to Ee VII 135 (Fest. Finklestein 13:135), *ašru* is explained as a synonym of *šamû*. In Ee VII 135 itself, *ašru* is paired with the poetic name for earth *danninu*, and this same pair probably also occurred in a now-broken line of *The Marduk Theology: ašra ibnû iptiq[u dannina]* (CT 25 47 K 8222 ii 12'). In two Nabu hymns (W. G. Lambert, JAOS 88 130 rev. 6; Khorsabad II 130:13), *ašru* is paired with the poetic name for the underworld, *kigallu*. In the incantation to Enmešarra (ZA 61 77:43–44), *ašru* is paired with the underworld name, *kurnugû*.

ašrata

The cosmic place-name $a\bar{s}rata$ occurs in Ee IV 141-42 and Ee V 121-22, but it is not certain from these contexts that $a\bar{s}rata$ is an alternate name for the heavens $(\bar{s}am\hat{u})$ that belong to Anu or a feature of these heavens (see p. 114).

There are at least three possible explanations of the name. First, the name may be a feminine form of ašru. Second, ašrata may be related to the Babylonian plural form ašrātu from the noun aširtu 'shrine'. This form occurs in The Agum-Kakrime Inscription (5R 33 ii 43, iv 5) and a Nabopolassar inscription (VAB 4 86 i 4 # JCS 26 67 no. 86:5). If so, ašrata may refer in some way to shrines of the gods in heaven. Third, ušrata may be related to the word ašartu 'hard ground', which occurs with a construct form ašrat (see CAD A/2 420). KAR 307 and AO 8196 preserve traditions that the floors of the heavens are made of hard stone.

burūmū, burummū

The term burūmū is a common name for the level of the stars or the night sky in first-millennium texts. The name derives from the root barāmu B 'to be speckled' (CAD B 103) and refers to the appearance of the night sky, where stars are seen as specks on a dark background. Like šamū, burūmū is a plural noun, as is demonstrated by the plural adjective in the term burūmū ellūtu 'clear night skies' (R. C. Thompson AAA 20 80:4; OIP 2 149 V 5).

Passages identifying burūmū as the night sky include an inscription of Nebuchadnezzar II, where a beautiful boat is said to sparkle like a kakkah burūmū 'star of the night sky' (PBS 15 79 ii 25), and a passage in a Neo-Assyrian inscription where the Moon-god illuminates the burūmū:

[d]sîn na-[un-na-ar šamê° u erşeti¹] bēl agê (cn.aga) mu-nam-mir bu-ru-me

F. Thureau-Dangin, RA 27 14:6-7

Sin, Mo[on-god of heaven and earth], Lord of the Lunar-disk, who illuminates the night-skies.

Additional evidence identifying burūmū as the region where the stars shine is found in the term šiṭir burūmē 'writing of the night sky', which refers to the fixed arrangement of stars in the sky. This sense of šiṭir burūmē is revealed in a hymn to Assur:

[xxk]i-ma ši-ţir hu-ru-um-me ul i-mes-sa a-dan-na SAA 3 p. 4 no. 1:21 (BA 5 653 21, cf. SAA 3 p. 5 no. 1:24)

[who..li]ke the "writing of the night sky" does not disregard a fixedtime

In astronomical contexts, the *adannu* of stars are the fixed times of their risings and settings over the course of the year. Thus, the *adannu* of *šiţir burūmē* must refer to the regular pattern of stellar movement during the course of a year. Similarly, the term *kippat burūmē u mā[tāti]* 'circle of the night sky and the

elâtu 227

lands', which occurs in a hymn to Marduk (SAA 3 7:8), and *kippat burūmē*, in a hymn to Nabu (S. A. Strong, PSBA 20 156:16), refer to the circular shape of the sky on clear nights.

elâtu

The term elâtu 'higher regions' is used both on its own and paired with šaplātu 'lower regions'. On many occasions, šaplātu is a name for the underworld (see pp. 292-91), so elâtu can often be a name for any higher region, including both the heavens and earth's surface. For instance, in Underworld Vision 68-69 (SAA 3 76 rev. 28-29), the prince is ordered back to the elâtu during a dream and wakes up on the earth's surface. On a few occasions, however, elâtu is clearly a name for the heavens or part of the sky. For instance, in Middle-Assyrian Etana, elâtu occurs twice in broken contexts during Etana and the eagle's flight to heaven (Kinnier Wilson Etana 64 I/G 2', 66:10). Elsewhere, the Moon-god, Sun-god and Ištar (Venus) shine in elâtu. In Ee V 11-12, Marduk commands Nannar to appear in elâtu (see p. 116); the Sun-god shines in the elâtu in a bilingual incantation (A. Falkenstein, UVB 15 36:5); and Ištar (Venus) is said to sit on the dais of Anu in elâtu in the Akkadian portion of The Exaltation of Ištar (B. Hruška, ArOr 37 484:37-38, see p. 250).

ermi danim 'Anu's Cover'

In Malku II 101 (see CAD Š/1 340), ermi danim 'Anu's Cover' is listed as a synonym of šamû. Apart from Malku, the term occurs three additional times in Neo-Assyrian royal inscriptions as a name for heaven paralleling the underworld name kigallu (OIP 2 149 V 4; Ebeling Parfumrez. pl. 27:10; Borger Esarh. 75:3), and once in an epithet of the tuppi šīmāti 'Tablet of Destinies':

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[p]i-riš-li šá-ma-mu ù èš-m[aḥ-l̞ui]
[m]ar-kas er-mi a-nu u ga-an-ṣir ṣer-ret t[e-ne-še-ti ²]
A. George, Iraq 48 135 B 4–5
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(Tablet of Destinies) [S]ecret of Heaven and Great Shrine, Bond of "Anu's Cover" and Underworld, Lead-Rope of M[ankind"]

Two passages in the inscriptions of Assurbanipal (Streck Asb. 148:26; Thompson Esarh. pl. 14 i 31) refer to ermi danim made of musukkannu-wood that are decorated to resemble the sky (šamāmeš). These wooden ermi danim are wooden ceilings or canopies of some sort. A comparable musukkannu-wood šamû is built by Nebuchadnezzar II in VAB 4 164:12.6

ešarra

Akkadian ešarra, like ašrata, only occurs as a name for part of heaven in Enuma Elish. In Ee IV 145-46 and Ee V 119-20, the region of heaven named

⁶ For šamû-canopies, including the golden šamû of Esagil, see CAD Š/1 348 2. Note also the canopy of Enki's boat an.má.dùl (see J. Klein. Fest. Artzi 93:19 n. 151).

ešarra belongs to Enlil and is located above the Apsu and earth's surface but below the heavens proper (šamū/šamāmē) that belong to Anu. The name ešarra also occurs as a name for temples of various deities in various cities, including the temple of Assur in Assur and the temple of Enlil in Nippur (see George Temples 144–45).

šubat danim, šubat šamê 'The Abode of Anu, Heaven'

The expression *šubat* ^danim stands in apposition to the term *šamû rap- šātu* 'broad heavens' in the Akkadian portion of a passage from *The Moon God*and the Demons:

an.dagal.la ki.tuš an lugal.la.ke4 hul.dib.bé su5.ga gaba.ri nu.tuku.a.meš ina šamê° rap-šu-ti šu-bat da-nim šar-ri lem-niš iz-za-zu-ma ma-hi-ra ul i-šú-u

CT 16 19:48-51

In the broad heavens, the Abode of Anu the king, they stand angrily. They have no rival.

A parallel term, šubat šamē/šamā-ī occurs in the prologue to the law-code of Ḥammurabi (CH ii 30–31) and the inscriptions of Tukulti-Ninurta I (Weidner TN 16:50–52). In the later text, the Assyrian king decorates a room, making it as beautiful as šubat šamê. In a parallel from the inscriptions of Tiglath-Pileser I (AKA 98:98–101), a room is decorated with stars to make it shine like the libbi šamê 'middle of heaven'. In this context, šubat šamê is the sky where stars are seen at night.

Equivalences of šamû

A number of equivalences of $\delta am\hat{u}^7$ are known from lexical lists and commentaries. In lexical lists, these terms appear in the left "Sumerian" column, indicating that they are non-Akkadian words. Because most of the equivalences only occur in lexical lists, it is not always possible to determine if they are names for heaven or equivalences of the homonym $\delta am\hat{u}$ meaning 'rain'.

The List K. 2035+ ii 17-33

K. 2035+ (2R 50+) contains a list of equivalences of $šam\hat{u}$. At present, 17 of these equivalences are preserved:⁸

⁷ For the equivalances of šamû, see below, CAD Š/1 339-40; George BTT 80:5-6: 11 = šamû, and cf. the Greek renderings of šamû in J. Knudsen, AOAT 240 138 rev. 1, 3.
⁶ The tablet is K. 2035a + 4337. A photograph is available in J. Curtis and J. Reade, Art and Empire (1995) 202 no. 218. See previously F. Weissback in ZDMG 53 655-57; CAD Š/1 339-40. A translation of the geographic portion of the tablet is found in MSL 11 54-56.

```
an = \check{s}\dot{a}-mu-\acute{u}
                                                                                       si = \delta \hat{a} - mu - \hat{u}
                                                                         u \cdot d = e \times \hat{u} \cdot \hat{u} = \hat{u} \cdot \hat{u} \cdot \hat{u}
        na = \check{s}\acute{a}-mu-\acute{u}
       me = \check{s}\acute{a}-mu-\acute{u}
                                                               zi_kuumENGUR = \check{s}\acute{a}-mu-\acute{u}
                                                               zika ra(IM \times IM) = \check{s}\acute{a} - mu - \acute{u}
       mu = \check{s} \acute{a} - mu - \acute{u}
                                                                          e^{nim}NIM = \check{s}[\acute{a}-mu]-\acute{u}
  e.nuen = š\acute{a}-mu-\acute{u}
                                                                    fel.dimidim = \check{s}[\acute{a}-mu]-\acute{u}
ge.esgis = samu-u
       im = \delta \dot{a} - mu - \dot{u}
                                                                       ur_{\pi}.ra.a\check{s} = \check{s}[\acute{a}-mu-\acute{u}]
                                                                            ^{\text{DUI}} d \mathbf{u}_{10} = \check{s} [\acute{a} - mu - \acute{u}]
si.rimsìr = šá-mu-ú
                                                                            \times [\times]UR = \check{s}[\acute{a}-mu-\acute{u}]
```

A much shorter list of equivalents is found in Nabnitu IV 371-73:9

```
an = \check{s}\acute{a} \cdot mu \cdot \acute{u}

idim = MIN

ur_5.ra.a\check{s} = MIN
```

MSL 16 92

The Equivalences

na (K 2035+ ii 18). No examples of $na = šam\hat{u}$ are known outside K. 2035a+.

me (K 2035+ ii 19). Sumerian me is also equated with šamû in Izi E i 1 (MSL 13 185), Proto-Aa 71:7 (MSL 14 91), and the commentary of An Address of Marduk to the Demons F: 8 (AfO 19 118). In the commentary, the syllable me of the word melammu is understood as a name for heaven while lam is equated with ersetu 'earth'. Additional examples occur in Kassite-period cylinder seals, where me me is used as a writing for šamê u erşetim in epithets (see W. G. Lambert, BiOr 32 222 4.16).

mu, giš (K 2035+ ii 20, 22). The name mu is also equated with $\delta am\hat{u}$ in Izi G i 9 (MSL 13 201) and the catchline to *Emesal II*, where mu is the Emesal equivalent of $\delta am\hat{u}$ and giš is the standard dialect word:

 9 Another long list of heaven names and related terms may be found in a poorly preserved portion of Izi A:

```
... šam]ê:
... ] 2
... ] 3
... ] šamê:
... ] šamê:
... ] šamê:
... MIN da]-nu
... ] šamê:
... š]amê:
... š]amê:
... MIN e-lu]-tum
... MIN 8ap-lu-tu]m
```

MSL 13 173 i 11'-20'

Note also MSL 11 61 v 155-64; Emar 567 1'-12'.

mu = giš = šá-mu-ú

MSL 4 10:116

Sumerian giš is also equated with šamû in Idu II 176 (CAD Š/I 339), and in Syllabaire S^a from Emar (Emar 537:208) where giš occurs with a gloss ni-eš (for ğiš). Another example of giš = šamû is found in a commentary explaining the name of one of two horses of the flood: giš.lam.šár.šár = muštābil šamê u erṣetim "The One who understands Heaven and Earth' (E. Weidner, AfO 19 110:40). Both mu and giš also occur in the name for the sky or parts of the sky mu.hé and giš.hé (sce pp. 239-38).

im (K 2035+ ii 23). Sumerian im is also attested as an equivalent of šamû in Idu II 340: i.mi = IM = šá-mu-u (see CAD Š/1 340).

si (K 2035+ ii 25). The equation $si = \check{s}am\hat{u}$ may be based on the equation $si.\grave{u}n.na = el\hat{a}t\:\check{s}am\hat{e}$, which is attested in a bilingual hymn from Uruk;

dutu.gim dungu.na na.an.ku₄.k[u₄.dam] ki-ma dšamaš ana ú-pe-e la ter-ru-u[b]

dnanna'.gim si.ùn.na múš nam!ba.[an.túm.ma]11 ki-ma dsîn ina e-lat šamêe la ta-pa-ra-[ak-ka]

SBH p. 128 rev. 36-39

Like the Sun-god, you do not enter a cloud. Like the Moon-god, you do not stop in the "Heights of Heaven."

In this passage si must be the equivalent of $šam\hat{u}$ because un is an equivalent of $el\hat{u}$ ('high'; see CAD E 110), although un itself may be equated with $šam\hat{u}$ in Aa VIII/2 46 (MSI, 14 498).

Another example of si = šamû is found in Aa III/4 171:

si = nu-ú-rum 'light'

si = na-ma-rum 'to shine'

¹¹ múš-túm = $napark\hat{u}$: see CAD N/1 279.

si = na-pa-hu 'to kindle'

 $si = š\acute{a}-mu-u$ 'heaven'

(MSL 14 341:168-71)

Here si may be a name for heaven because si has a general meaning 'light'. According to NBC 11108 (see p. 139), the heavens glow with their own light independent of the luminaries in the sky.

A related equation si.an.ta = elâtu occurs in a late bilingual incantation to Utu (A. Falkenstein UVB 15 36:5).

¹⁰ Compare also the name of Nippur dir.giš.lam Bond of Heaven and Earth', which is equivalent to the more common dur.an.ki (see A. George, RA 85 160), and O. Neugebauer and A. Sachs, JCS 21 213: giš.nim giš.šú = 'east, west'. See also p. 257 for Craig ABRT I 32 rev. 9.

zikum (K 2035+ ii 27). The equivalence zikum = šamû is also documented in Aa I/2 236 (MSL 14 215), while zikum itself occurs in the Ur III personal name ur zikum ma (Kang SACT I 119:2). This same sign with the reading engur is a common Sumerian name for the Apsu.

zikara (K 2035+ ii 28). Two entries in Antagal preserve equivalences for $\check{s}am\hat{u}$ that may be compared with zikara (IM×IM) = $\check{s}am\hat{u}$.

zigaar $IIM^{I}x = \delta \hat{a} - mu - \hat{u}$ IM

Antagal III 177 (MSL 17 156)

zi.ga.rum U.ŠA = $\delta \hat{a}$ -mu- \hat{u} U.ŠA

Antagal G 281 (MSL 17 228)

Here, zigar (IM×IM) is the same name as zikara. The entry in Antagal G may also represent this name, although a different Sumerian writing is used. The name(s) of heaven zikara, zigar, zigarum presumably represent a foreign word(s).

idim (K 2035+ ii 30). The equation idim (BAD) = $\S{am\hat{u}}$ occurs in K. 2035+, Nabnitu IV (see p. 229), Aa VIII/2 (MSL 14 499:59), and Emar 537:693′, 568:51′. 12

uraš. Sumerian uraš occurs as a synonym for šamû in K. 2035a+, Nabnitu IV (see p. 229), and Izi H 232 (MSL 13 208), as well as Ea I 338b and Aa I/8:35 (MSL 14 194, 240). A Sumerian literary example of uraš as a name for the sky occurs in a hymn of praise to the barge of Enlil in Shulgi R:

má.sag.zu.ù ^dnanna ur₅.ra.aš sa₆².[ga² (x x x)].^rme¹.è[n] má.egir.zu.ù ^dutu an.úr.r[a (x x x x) c.a.me.èn] I. Klein. Fest. Artzi 104:37–38

As for your prow, you are (like) Nanna graci[ng (...) the sky. As for your stern, [you are (like)] Utu [rising o]n the horizon.

Elsewhere, however, uraš is usually a name for earth rather than heaven. For instance, the Sumerian pair an.uraš occurs in numerous contexts meaning 'heaven and earth'. The process by which uraš developed a second meaning 'heaven' is not clear but may parallel the evolution of the divine name duraš from a name for Anu's spouse. Antum, to a name for Anu himself. Is

¹⁴ Scc W. G. Lambert, Unity and Diversity 197.

¹² For this name at Ugarit, see J. Huehnergard, NABU 1991 p. 39 no. 58.

¹⁹ For the cosmic pair a n.u r a s, see Sjöberg Moongod 67 n. 4, 75 n. 5, and 79 nn. 14-15. Note also ZA 52 59:27: OrSuec 19-20 147 no. 3 rev. 6.

bur, bùr, bùru, burû. Sumerian buru 'pit, hole, well' occurs as an equivalent of šamû in the catchline of the god-list K. 2100 (CT 25 18 rev. ii 20). The same name, or a homonym, is also attested at Emar: bur = HAL = šamû (Emar 537:291). Akkadian burû occurs three times as a name for heaven: twice in a late copy of a hymn to Aya (SpTU III 75:12, 19) and once as a variant of burûmû in a šu.íla to Nabu (see W. Mayer, Or 59 461:9; see n. 9 [4]). The Akkadian name may be a loanword from Sumerian bùr/bùru or be derived from burûmû, as suggested by W. Mayer, in Or 59 465.15

U+GA (utah, utu). The sign U+GA occurs in S^b and a precursor to Ea with readings utah and utu as equivalents of šamû and šupuk šamê: ¹⁶

u.ta.ab = U+GA = v.tu

$$3\acute{a}$$
-mu- \acute{u} / $5\acute{u}$ -puk $3\acute{a}$ -mu- u

 u.tu = U+GA = di-ik-tum Sb87-88 (MSL 3 104; 4 206)

 ú.tú = ${}^{f}U^{1}$ +[G]A = $3\acute{a}$ -mu- \acute{u} = $3\acute{t}$ - $1\acute{t}$ - $1\acute$

Textual examples of utah demonstrate that the term is a name for the sky. In a hymn to Nannar, the Moon-god shines in utah:

```
a.a <sup>d</sup>nanna utah<sup>he</sup>.bad.ta gi<sub>6</sub> du<sub>10</sub>.du<sub>10</sub> gal.zu
A. Sjöberg, OrSuec 19/20 146:7
```

Father Nanna, who knows how to make the night sweet throughout the distant heavens.

Parallels are found in a Rim-Sin Hymn (UET 6 101:19) and two Rim-Sin inscriptions (RIM 4 272:6, 300:5).

 \dot{u} n/ \dot{u} g. Sumerian \dot{u} n/ \dot{u} g (high) is equated with $\dot{s}am\hat{u}$ in Aa VIII/2 46, 51 (MSL 14 498–99). A related name is listed later in this same tablet: [X] = EZEN_x KASKAL = $\dot{s}a$ - $q\dot{u}$ -u, $\dot{s}a$ -mu-u (MSL 14 499:80–81). The name may also occur in a hymn to Nanna: 17

```
ùn.na è me.an.na šu.du<sub>7</sub>
TCL 16 pl. 152:2 (Sjöberg Mondgott 65:2)
```

(Nanna) who comes out in "The Above" perfects the me of heaven.

 15 W. Mayor in Or 59 465 n. 9 derives the name $bur\bar{u}nu^e > bur\bar{u}m/w^e > bur\bar{u}w$. For Aa II/4 129 (MSL 14 283), see W. C. Lambert, JNES 33 302 n. 6. For the god-list K. 2100, see A. Kilmer, JAOS 83 423. See also Ea II:216 (MSL 14 256).

¹⁶ In Or 52 237-40, M. Civil argues that U+GA was originally used to designate a cereal dish that came to be known as šipku in Akkadian. Sumerian U+GA, then, came to be a name for heaven through the homonym šipku/šupku in šipik/šupuk šamê in the Old Babylonian period. See also CAD D 138-39 diktu and Charpin Le Clergé 199. A word utah meaning 'light rain' also occurs in astronomical diaries (see Sachs-Hunger Diaries I 33).

17 Note also A. Sjöberg, OrSuec 19/20 148:32, 37: ùn.e. giš.hé.a me.te [...

girra. The name girra for heaven is known from parallel entries in Aa II/4 (MSL 14 284:141) and Antagal D 121 (MSL 17 205). In both lists, girra is written UMAŠKAB. In Antagal D, the name occurs before three names for earth (see p. 271). Exactly how girra can to be a name for heaven is unclear. 18

Kassite Names for Heaven

Kassite names for heaven may be listed in a Kassite-Akkadian list, where dagilgi and ilulu are equated with šamû.

```
da-gil-gi = šamû<sup>s</sup>
i-lu-lu = šamû<sup>s</sup>
zi-in-bi-na = zi-na
mi-ri-ia-áš = er-șe-tum
tu-ru-uh-na = ša-a-ru
```

T. Pinches, JRAS 1917 103:19-23 (Balkan Kassit. Stud. 4)

At least one of the two Kassite equivalences of *šamû* could mean 'rain' instead of 'heaven'. The third term is translated *zi-na*, which may be a writing for Akkadian *zinnu* 'rain'.

Names of Parts of the Sky

A number of Sumerian terms and Akkadian equivalents serve as names for parts of the sky. These include:

'Horizon': an.úr = išid šamê 'Heaven's Base, The Base of

Heaven', an.zà 'Heaven's Edge', nab/pţû

'Zenith': an.pa = elât šamê 'Heaven's Top, The Heights of

Heaven'

'Middle of the Sky': an.šà = qereb šamê, libbi šamê

Akkadian *šupuk šamê* and its Sumerian equivalents including giš.þć, mu.þé, ul.þé.

These terms are not used in a consistent manner. They often seem to be synonymous with one another or to refer to overlapping areas. For example, different versions of a bilingual lamentation translate mu.hé as *šupuk šamê* (Cohen Canonical Lamentations p. 154:18) and *elât šamê* (KAR 375 ii 42–43; see Cohen Canonical Lamentations p. 173).

¹⁸ Note in this context a broken passage in Inamgišhuranki that may relate the heavens to the fire-god Girra: . . .] an ^dgi-ri '. . .] (of?) An/Heaven is Girra?' (CT 25 50: 18, Livingstone 32:7; and van Soldt Solar Omens 45:17': ^{girat}...MAŠ.KAB: ša·mu·ū'). Girra is both a son of Anu and constellation in *Girra and Elamatum* (C. Walker, AnSt 33 145–53, esp. 150 n. 48) and a constellation in Prayers to the Gods of the Night (RA 32 180:15, 181:16).

Each of the terms consists of a name of heaven, with a second noun referring to a portion of the sky. In the Akkadian terms, the part of the sky comes first, followed by $šam\hat{u}$ or $bur\bar{u}m\bar{u}$ in the genitive case. In the Sumerian terms, the opposite occurs, with the name of heaven placed first. For instance, an.úr and an.pa consist of an (heaven) followed by ur and pa. Likewise, mu.hé and giš.hé consist of the Sumerian names mu and giš (which are equated with one another and $šam\hat{u}$ in the Emesal vocabulary (MSL 4 10:116), plus hé. The order of nouns in these Sumerian terms is the reverse of the standard genitive construction, where the part precedes the whole. This reversal of order cannot be explained, but parallel constructions occur with a few other nouns, including giš 'tree', kur 'mountain', ab 'sca', uru 'city', and gi 'reed'. 19

Ancient scholars conceived of these names as a group of related terms. Entries an. $\dot{u}r = i\dot{s}id\ \delta am\hat{e}$ and an.pa = $el\hat{a}t\ \delta am\hat{e}$ often occur consecutively in lexical lists, Antagal G lists four sets of terms as a group, and Emar 567:2-4 preserves three paired terms:²⁰

```
\begin{array}{rcl} \text{ul}_4 &=& \S{u}\text{-}p{u}\text{-}uk \ \S{a}m{\hat{e}^c} \\ \text{ul}_4, \text{h\'e.a} &=& \text{MIN } \textit{bu-ru-me} \\ \text{an.pa} &=& e\text{-}lat \ \S{a}m{\hat{e}^c} \\ \text{an.\~s\`a.ga} &=& q\acute{e}\text{-}reb \ \S{a}m{\hat{e}^c} \\ &&&& \text{Antagal G } 223\text{-}226 \ (\text{MSL } 17\ 227) \\ \text{an.d\'im} &=& i\text{l-}di \ \S{a}\text{-}me\text{-}e \ (i\text{s\'id } \S{a}m{\hat{e}}) \\ \text{an.pa.d\'im} &=& i\text{-}la\text{-}a \ \S{a}\text{-}me\text{-}e \ (el\^{a}t \ \S{a}m{\hat{e}}) \\ \text{an.a.\S\grave{a.ga}} &=& q\acute{e}\text{-}re\text{-}b \ \S{a}\text{-}|me\text{-}e| \end{array}
```

'The Horizon'

an.úr = išid šamê, an.zà = $p\bar{a}t$ šamê, šaplan šamê. 21 Terms for 'horizon' refer to the lower portion of the sky, including the actual horizon where heaven and earth meet and a band above the horizon. This portion of the sky is usually identified as an.zà 'Heaven's Edge' or an.úr 'Heaven's Base' in Sumerian texts and $i\bar{s}id$ šamê 'the Base of Heaven' in Akkadian texts. In addition to the visible horizon in the sky, an.úr, an.zà, $i\bar{s}id$ šamê, and $p\bar{a}t$ šamê also refer to the edge of the earth's surface. The border between 'Horizon' and 'Zenith' is never defined in any Sumerian or Akkadian text.²²

¹⁹ For giš. pa and giš. úr, see MSL 5 139:514-15. For ab. šà and kur. šà, see TCS 3 108 n. 283. For kur. bar and kur. šà, note PBS 1/2 115:15-16. For uru. bar and uru. šà, see PSD B 97 2.2.5. For gi. úr/šà/pa/bar, see MSL 7 17:158-56.

²⁰ For further lexical examples, see Antagal III 152-54 (MSL 17 155-56, see p. 237); MSL 13 16:18-22, 34:11'-12' (Proto-Izi), MSL 11 61 v 159-60, and MSL SS1 87 ii 5'-6'. For Akkadian and bilingual examples, see CAD E 79 c.

²¹ Note also KAR 375 ii 40-41 an.dib.ba = *išid šamê* (see Cohen Canonical Lamentations 173).

²² For a different opinion, see E. Weidner, Babyl. 6 2 n. 1.

an.úr = išid šamê 'Heaven's Base', 'The Base of Heaven'. Sumerian an.úr and Akkadian išid šamê are equated with each other in numerous lexical lists and bilingual works (see CAD I 235–36). In Bit Rimki, an.úr = išid šamê is the place where heaven and earth meet and the Sun passes from heaven to earth at sunrise:

ki.šè an.ki téš.bi lá.a.ta an.úr.ta um.ta.è.na.z[u.š]è ana e-ma šá-mu-ú u erṣetum'um ištenišniš na-an-du-ru iš-tu i-šid šamê° ina (a-se-ka)

R. Borger, JCS 21 3:4

When you (Sun-god) rise at the place where heaven and earth embrace, from the horizon.

In Ee V 17-20, the Moon and Sun are said to see each other at *išid šamê* at the middle of the month, the time of the month when the Moon rises at the eastern horizon just as the Sun sets at the western horizon. The fact that an.úr and *išid šamê* include a band of heaven above the horizon is demonstrated by BBR 2 p. 102:101 and parallel passages, where *išid šamê* turns red at dawn before the Sun rises. At this time of day, the lower part of the eastern sky above the horizon is tinged red by the approaching Sun. A parallel with úr.an.na instead of an.úr is found in Lugale 181:

me.dam úr.an.na síg hć.ma.da.gim sa₅.šè ur₅ hé.en.na.nam.ma ma-ti-ma i-šid šamê^e ki-ma na-ba-ši ṣa-rip ši-i lu-u ki-a-am Lugalc 74:181 (Bilingual Version)

When the horizon is dyed red like red-wool, let this be so.

an.zà = $p\bar{a}t$ šamê 'Heaven's Edge', 'The Edge of Heaven'. Sumerian an.zà is a near synonym of an.úr = $i\bar{s}id$ šamê. Although the normal meaning of zà is $p\bar{a}tu$ 'edge, border', zà is also equated with $i\bar{s}du$ in Λ a VIII/4 9 (MSL 14 509). Like an.úr, an.zà comprises the actual horizon, plus a band above the horizon. In Gudea Cyl. A IX:18–19 (see p. 94), kur.kur 'the lands' apparently extends to an.zà, just as earth meets heaven at an.úr and $i\bar{s}id$ $i\bar{s}am\hat{e}$ in $i\bar{s}id$ $i\bar{s}am\hat{e}$ in $i\bar{s}id$ $i\bar{s}am\hat{e}$ in $i\bar{s}id$ $i\bar{s}am\hat{e}$ in $i\bar{s}id$ $i\bar{s}am\hat{e}$ in where $i\bar{s}id$ $i\bar{s}am$ $i\bar{s}am$

nin an.usan an.zà.šè mah.[àm]

Reisman Two Hymns 153:85

The Lady of the Evening (Inanna) [is] magificent at the horizon.

²⁸ For parallels, see chapter 1 n. 16 (p. 10).

²⁴ Note also Westenholz OSP 1 no. 6:2 (= B. Alster, Kramer AV p. 14): kur.kur gurum.ù den.líl an.zà.šè, and Fest. Sjöberg 305:59 an.ki.zà.til.la.fbil.šè. See also W. Römer. Kraus AV 305.

The planet Venus alternately shines in the lower western sky at dusk, and the lower eastern sky at dawn.

A bilingual example of an.zà as a cosmic place name occurs in Utukku-Lemnutu VI, where an.zà is equated with pāṭ šamê.

mu nu.tuku mu.ne an.zà.šè šu-ma ul i-šú-u šum-šú-nu ana pat šamêe

CT 16 33:189

O (demon) who has no name, their name (goes) to the horizon.

In this context, an.zà and $p\bar{a}t$ šamê refer to the ends of the earth's surface where demons could presumably cross into the underworld, just as the Sun rises and sets from the underworld. A parallel with names for both heaven and earth occurs in Samsuiluna E.²⁵

ní.mc.lám nam.lugal.la.mu zà.an.^rki¹.ke₄ hé.'en.dul' pu-luh-ti me-lám šar-ru-ti-ia pa-aṭ ša-me-e ù er-ṣe-tum lu ik-tum RIM 4 382, Sumerian version 68–70 Akkadian version 64–66

My terrifying royal splendor covered the borders (i.e. all) of heaven and earth

šaplan šamê 'The Lower Parts of Heaven'

The term šaplan šamê occurs in an incantation to Shamash, replacing išid šamê alongside an unusual writing of elât šamê:

(ištu) AN.PA šamê⁴ ana šap-la-an šamê⁴ uš-šú-ru šá-ru-ru-ka KAR 32:26

Your shine runs free (from) the "zenith of heaven" to the horizon.

Zenith (an.pa, elât šamê, appi šamê) 'Heaven's Tip', 'The Heights of Heaven', 'The Tip of Heaven'

The portion of the sky an.pa = elât šamê is the part of the sky above an. úr = elât šamê. The meaning of elâtu 'upper parts' in elât šamê is obvious, because elât šamê is the top part of the sky, but the etymology of an.pa requires explanation.

Two ancient explanations of a n.pa are available. First, pa is understood as appu 'tip' in Proto-Izi: [a] n.pa = a-pt ša-me (MSL 13 36 B 5). Second, pa is itself explained as elâtu in Aa and Antagal:

Note also M. Civil, NABU 1987 n. 49: zà an.ki; F. Al-Rawi, Iraq 52 3:21: pāṭ kiššat šamê u erṣetim; AAA 20 pl. 90: 3-4: . . . pāṭ šamāmē u qaqqari.

(pa.a = PA) = e-li-tum = e-la-tum šá ša $m\hat{e}^e$ Aa I/7B ii 4'-5' (MSL 14 237)

pa = e-la-a-tum an.pa = MIN šamê^c an.úr = i-šit-tum šamê^c Antagal III 152-54 (MSL 17 155-56)

In many contexts, an pa = elât šamê is paired with an úr = išid šamê, indicating that these two parts of the sky together comprise the entire visible heavens. In The Exaltation of Ištar, the Sun- and Moon-gods are assigned the task of keeping the stars on their courses from an úr = išid šamê to an pa = elât šamê (B. Hruška, ArOr 37 484:55-56; see pp. 144-45). In the inscriptions of Tiglath-Pileser III, Nebuchadnezzar II, and Neriglissar, the kings claim worldwide dominion from išid šamê to elât šamê. Here, these two parts of heaven apparently cover the entire earth's surface (see diagram, p. 261).

In addition to the Sun, Moon, and stars, which perform duties in 'horizon' and 'zenith' in *The Exaltation of Ištar*, other texts place meteorological phenomena, including clouds, a rainbow, and *akukūtu* 'haze', in *elât šamê* (see CAD E 79 2').

an.pa an.ka, AN.PA šamê. Two unusual writings of 'the zenith of heaven', an.pa an.ka and AN.PA šamê, apparently construe an.pa as equivalent to elâtu instead of elât šamê. In the Kassite period Sumerian work The Duties and Powers of the Gods, the Akkadian-speaking author apparently translates elât šamê back into Sumerian as a genitive construction an.pa an.ka:

...x].da kù.ga.bi nu.mu.ni.in.te.cš.àm an.pa an.ka ba.ra.an.sum.mu.uš ^dnanna gi₆ zalag.ge.da u₄.da ug.gá ku.ku.da [g]iskim gi₆.a [zu.z]u.da...

Sumer 4 pl. 1 v 1'-16'

...] their clear they could not ..., they had not given in "the zenith of heaven." In order that Nanna would make the night bright, would rest during the day when it is light, would [make kno]wn the [s]ign of the night, ...

The Akkadian writing an. pa $\S{am}{\ell}$ in KAR 32 26 (see p. 236) parallels Sumerian an. pa an.ka.

 $\mathbf{mu.h} \in \mathbf{el\hat{a}t}$ šamē. As noted above (p. 233, KAR 375 ii 42'-43'), one exemplar of a bilingual lamentation preserves the equation $\mathbf{mu.h} \in \mathbf{el\hat{a}t}$ šamē.

 26 See CAD E 79 2': Tadmor Tigl. 158:4, 194:4. Compare The Gilgamesh Letter 1–4 (F. Kraus, AnSt 30 109) and Piccioni Adapa 122:7–8. Note also B. Alster, ASJ 13 48:68–69 and Sargon Geography 31, where Sargon of Akkad conquers $m\bar{a}t\ sihip\ \check{s}am\hat{e}$ 'the totality of the land under heaven'.

si.ùn.na = elât šamê. The term si.ùn.na is translated as elât šamê in the late copy of a bilingual hymn (SBH 128 rev. 38–39; see p. 230) where the Moon-god is placed in the region. Here, si is probably the name of heaven si = šamû, and ùn is probably to be interpreted as elâtu.

Three additional examples where the Moon shines in si.ùn.na also occur in Sumerian literature: Sjöherg Moongod 70:2; ELA 271; Death of Ur-Nammu 13 (see JCS 21 113). The Sumerian term also occurs in a lists of cosmic terms in Proto-Izi and Nabnitu:

```
an
kі
giš.hé
ul.hé
ub.šī
kur.ùn.na
si.ùn.na
ub.da.4
                              Proto-Izi 52-58 (MSL 13 18)
an.si.\dot{u}[n.na = e-la-at šam\hat{e}^e]
si.BÀD.bla
              = MIN MIN
si.ùn.[n]a
              = [MIN MIN]
kur.BàD.ba
              = [ša-du-u e-lu-u]
kur.ùn.na
              = [MIN MIN]
                              Nabnitu XXV 145-49 (MSL 16 227)
```

In Nabnitu XXV 145 as restored, the term an.si.ùn.na is construed on the pattern of an.pa, an.úr, and an.zà, with the name of heaven an followed by si ùn na (= eláta). In surviving examples of si ùn na (nly the Moon is found

is i.ù n. na (= $el\hat{a}tu$). In surviving examples of si.ù n. na, only the Moon is found in the region, although the Sun and meteorological phenomena, as well as the Moon, are found in an.pa = $el\hat{a}t$ šamē.

'The Middle of Heaven' (an.šà, šà.an.na, <u>qereb šamê</u>, <u>libbi šamê</u>)

The use of terms for the 'middle of heaven' 27 as a part of the sky are problematic. Sumerian an. šà occurs in a few passages as an unseen portion of heaven above the sky, where Anu lives (see pp. 247-49). Elsewhere, Sumerian sà with a following noun in the genitive case can be used as a preposition meaning 'in'. Similarly, the Akkadian prepositional phrases ina libbi and ina qereb often mean little more than ina ('in'). Thus an. šà, ina qereb šamê, and ina libbi šamê often occur with the meaning 'in heaven'. Nevertheless, there are examples where an. šà, qereb šamê, and libbi šamê do seem to be used as names for part of the sky. In Antagal G 223-26 and Emar 567:2-4 an. šà. ga/an. a. šà. ga = qereb šamê occurs in lists with names for 'Horizon', 'Zenith', and

 $^{^{27}}$ CAD Q 8 qablu A b offers no syllabic examples of qabal šumê as a name for the 'middle of the sky'. Thus, examples of \mathtt{MURUB}_4 šamê under qablu could be rendered qereb šamê.

šupuk šamê/burūmē (sec p. 234). Likewise, šà.an.na = qereb šamê occurs in a common blessing formula alongside names for heaven and earth:

an.gim hé.en.kù.ga : ki-ma šamê* li-lil ki.gim hé.en.sikil.la : ki-ma erşetimtm li-bi-ib šà.an.gim hé.en.daddag.ga : ki-ma qé-reb šamê* lim-mir

Šurpu 53:26-28

May he be pure like heaven. May he be clean like earth. May he shine like the "middle of heaven."

The shine of an.šà and *qereb šamê* is the glow of the stars. This is demonstrated by an inscription of Tiglath-Pileser I where a temple is described in terms of the stars and *libhi šamê*:

ki-ma lìh-bi šamê° ú-be-en-ni i-ga-ra-a-te-šu ki-ma ša-ru-ur și-it kakkabāni™⁵ ú-si-im ú-šar-rih

AKA 98:98-101

I decorated it like the heart of heaven. I made its walls shine with a brillance befitting the light of the stars.

Other visible astronomical and meteorological phenomena seen in an.šå include the Moon (Sjöberg Mondgott 44:9), the Sun (Gudea Cyl. B I:7), Venus (Reisman Two-Hymns 153:82, 154:104, 155:120, 157:141), clouds (Sjöberg Mondgott 119:8); and rainbows (EWO 345).²⁸

Although it may be assumed that the "Middle of Heaven" included the center of the sky around the apex of the celestial dome, it is not possible to determine how far the "Middle of Heaven" extended downward.

šupuk šamê and Its Equivalences

šupuk burūmē, šipik šamê giš.hé, mu.hé, ul/ul₄.hé, ul₄, utah

The term *šupuk šamê* and its equivalences occur in literary texts as the portion of the heavens where stars, the Sun, Moon, and Venus shine and winds blow. In *The Moon God and the Demons* (= Utukku Lemnutu 16), the Sun, Moon, and Venus are said to regulate ul.hé = *šupuk šamê*:

dnanna dutu dinanna.kc₄ ul.ḫé.a si.sá.e.dè im.ma.ni.in.gar dsin(30) dšamaš u diš-tar šu-puk šamê° ana šu-te-šu-ri uk-tin-nu CT 16 19:59-61

the Moon-god, Sun-god, and Venus were appointed to regulate the firmament

²⁸ For an.šà sec also Gud. Cyl. A 25:4, B 1:18. For additional Akkadian and bilingual examples of *gereb šamê*, sec CAD Q 220–21. See also Oppenheim Dreams 327:70 and George Temples 143 nos. 1009, 1011.

In Antagal G 228–24 (see p. 234), ul $_4$ and ul $_4$ -hé.a are equated with *šupuk šamê* and *šupuk burūmū*. In variant exemplars of S $^{\rm h}$, Sumerian utah is translated alternately as *šamū* and *šupuk šamê* (see MSL 3 104:87, MSL 4 206:87), while ul.hé is translated as *šupuk šamê* in the hymn to Inanna/Ištar (Cohen Eršemma 132:24 = SBH 53 rev. 48–49), but as *šamū* in the Exaltation of Ištar (B. Hruška ArOr 37 484:29–30), and LKA 23 rev. 8′–9′. Thus, *šupuk šamê* and its equivalences are in some sense equivalent to the entire sky. Although the above examples establish the sense of the terms, their origins and etymologies are uncertain. Therefore, it is useful to examine each more closely.

giš.hé, mu.hé, ul.hé, ul.hé, ul.hé, 29 The terms giš.hé, mu.hé, ul.hé, and ul₄ hé consist of a common element hé with a preceeding noun. The element hé corresponds to *šupku* in Akkadian *šupuk šamê*, and while giš, mu, ul/ul, correspond to šamû. Thus, the first elements should be names for heaven or related terms. Sumerian giš and mu are listed as equivalents of šamû in the Emesal vocabulary (MSL 4 10:116) and K 2035+ ii 20', 22' (see p. 229). The word ul/ul, does not occur as an equivalent of $\check{s}am\hat{u}$ but may be identified as ul = kakkabu 'star' (see CAD K 46). Nonetheless, the origins of the element he in the Sumerian terms and how he came to be equivalent to *šupuk šamê* remains unclear, because no surviving evidence for he = šupku/šipku exists other than the terms themselves. One possibility is that the meaning of hé = šupku/šipku reflects an early lexical tradition that did not survive to be included in Old Babylonian canonical lists suchs as Proto-Ea and Proto-Aa (see MSL 14 476, 489), although the meaning "giš.hé, mu.hé, ul.hé = šupuk šamê (and equivalents)" did survive. An Early Dynastic period example of ula hé referring to the sky may occur in The Stele of the Vultures (see J. Cooper, RA 74 94).30

šupuk šamê/šipik šamê, šupuk burūmū. Like their Sumerian equivalents, Akkadian šupuk šamê, šipik šamê, and šupuk burūmū consist of a name for heaven and a second noun. All three terms are synonymous. Akkadian šupku and šipku arc equivalent nouns derived from the root šapūku 'to pour out, to heap up', and burūmū and šamū arc synonyms. The terms can be compared with the parallel constructions šipik šadî/šupuk šadî (see AHw 1245 šipku 4; 1280 šupku 2), which refer to the foundations of mountains. As such,

²⁹ The reading hé for GAN is based on the variants giš.hé/he (= šupuk šanuê) in TCS 3 36:324. Additional writings with he may be found in TCS 3 26 164 (ul.he.a/utahhe.a) and MSL 11 61 v 156 (ul.he.hover, ul.hhe here is followed by an.šár, ki.šár 'all of heaven, all of earth' (MSL 11 61 v 157-58), so giš.he, mu.he, ul.he might best be understood, at least in some cases, as giš/mu.šár ('all of heaven') and ul.šár ('all of the stars'). If he is always to be read šár in these compounds, then a reading gan for he cannot be ruled out (i.e., giš.gan, mu.gan, ul.gan, perhaps again 'all of heaven, all of the stars' on the basis of GAN = kullatu 'entirety'). The element hé might also be the same as that in hé.nun = nuhšu 'abundance'. Cf. TCS 3 115 no. 324 for further examples and discussion and ibid. no. 164.

30 See also p. 140 for Sollberger Corpus Ukg. 15 iii 2: ul.[hé²].

the imagery suggested by *šupuk šamêlšipik šamê* and *šupuk burūmū* may be that of the sky serving as the foundation for the unseen higher regions of heaven above, just as mountains risc above their foundations.³¹

Other Examples of *šupuk šamê* and Its Equivalences. Numerous other examples prove that *šupuk šamê* and its equivalents are names for at least part of the sky. A passage in *The Moon God and the Demons* states that seven wicked storm demons whirled around the Moon in ul_4 . $\mathrm{h} \acute{e} = \check{supuk} \, \check{samê}$ (CT 16 20:70–74); hymns to Nannar place the Moon in giš. $\mathrm{h} \acute{e}$ (A. Sjöberg, OrSucc 19/20 144:2, 145:1; 148:32, 37, 149:64); and Gilg. IX ii 4 explains that scorpion-men observe the setting Sun by Mt. Mašu, whose peak reaches up to $\check{supuk} \, \check{samê}$. In this Gilgamesh passage, the Sun may move along $\check{supuk} \, \check{samê}$ before setting behind Mt. Mašu.

The term *šipik šamê* occurs in *Proto-Kagal* (Bilingual) (MSL 13 87:44), translating gi š.hé, and perhaps also in Babyl. 6 98:6 (see AHw 1245 5). The only known example of *šupuk burūmū* is Antagal G 224 (MSI. 17 227).³²

pāni šamê 'Face of Heaven'

The term pāni šamê occurs in Neo-Assyrian royal inscriptions and astronomical omens. In these passages, pāni šamê is a portion of the sky where the stars and moon are seen on clear nights. When the sky is not clear, pāni šamê is said to be covered. Thus pāni šamê must be the surface of the clear sky above the cloud cover. For instance, the 'face of heaven' is obscured by smoke from fires in the inscriptions of Sargon II (TCI. 3 30:182; 32:198; 42:261, 268), by smoke and dust in the inscriptions of Sennacherih (OIP 2 40:80; 44:58–59), and by anqullu 'haze' in an astronomical omen (ACh Šamaš 14 7, see CAD A/2 144 b). In contrast, the visible 'face of heaven' shines like moonlight in an Old Babylonian astronomical omen: 33

[šumma š]a-mu-ú ki-ma s[i-i]t wa-ar-ḥi-im pa-nu-šu-nu na-am-ru-ú...

T. Bauer, ZA 43 309:3-4

If the face of the heavens shines like moonlight . . .

In AS 16 286 rev. 23, *pāni šamê* is contrasted with the Heaven of Anu above the sky (see p. 246).

³¹ For šapākų with mountains, clouds, and the sky, see CAD Š/1 414-15 6'.

³² Note also Šurpu 46:38: ... an.úr hé.an.na '... horizon and "šupuk šamê" and AMT 103 8 hé.7.bi 'seven firmaments' (scc p. 214).

³³ For additional examples of pāni šāmē, see AHw 820 9 and AfO Beih. 22 287 rev. 10, where F. Rochberg-Halton translates the surface of the sky'.

an bar

The term an.bar, another name for a portion of the visible heavens, is formed on the pattern an.zà, an.úr, an.pa, and an.šà. The term occurs as a cosmic place-name in a hymn to Ningiszidda:

lugal ní.ri.a íldu utu.bi sag.ba gin.a an.bar an.ta a.ba šá.du.ne a.na an.da.sá.a TCL 15 pl. 113 rev. 6'-7' (J. van Dijk, Sumerische Götterlieder 82:28-29)

Fearsome king, Sun-god of the host, who goes at the fore, at the ... above, who can equal you? What can rival you?

The term an.bar may be an opposite of an.šà since bar and šà are often opposites meaning 'outside' and 'inside' (see PSD B 93, 96–98). If so, an.bar may be another name for the horizon, since an.šà refers to the center of the sky. A related term, an.bar.bar, may also occur as an opposite of an.šà in Gudea Cylinder A:34

é.K.A.gíd.da.bi an.bar.bar.ra ní.gál.la.àm é é.dul₄.la.bi nu₁₁ an.šà.ge diri.ga.àm Gudea Cyl. A 25:2-4 (cf. PSD B 98 1)

The long... of the temple was splendid at heaven's sides. The... of the temple was like a light filling the center of the sky.

³⁴ Note also an.ba = šamû and an.ba.ni = šamû petûtum (AS 16 24:90-91); an.bar.Bu.a in MSL 11 61 v 163; Emar 567:10' an.bar.an.......

The Geography of the Heavens

Introduction

Heaven is the upper of the two halves of the universe. In ancient Mesopotamia, as in the Judeo-Christian tradition, the heavens include both visible areas, where the stars, Sun, Moon, and planets are seen, and higher regions above the sky, where gods of heaven dwell. Only the lists of KAR 307 and AO 8196 and Enuma Elish provide clear evidence that the heavens consist of the sky and more than one level above the sky. In both KAR 307 and AO 8196. three heavens are listed: the Upper Heavens, belonging to Anu; the Middle Heavens of the Igigi above the sky; and the Lower Heavens (the sky) of the stars, KAR 307 adds that Marduk settled 300 Igigi in the Upper Heavens, that Bel sits in his cella in the Middle Heavens, and that Marduk drew stars on the Lower Heavens. The interior of Marduk's cella in the Middle Heavens is not seen from earth, but its blue saggilmud-stone floor may be visible as the blue sky (see p. 9). Below the heavens in KAR 307 there are three earths: the earth's surface, Apsu, and underworld. The area between the earth's surface and the stars is not listed in KAR 307 or AO 8196 but is part of the heavens in other texts. For instance, numerous passages speak of birds, clouds, and winds in the heavens (See CAD \$/I 345-47), so the region of the universe we call the "atmosphere" or "sky" was clearly part of heaven in ancient Mesopotamia. This interrelationship between heaven and the atmosphere is further illustrated by a passage from Lamaštu, where dew is said to come from the stars:1

Note also the following passage from Sagigameš: mul.an.gim sur.sur.ra a.gim gi₆,a al.du.du ki-ma kak-kab šá-ma-me i-ṣar-ru-ur ki-ma mê^{mes} mu-ši il-lak CT 17 19:11-12

(Headache) flashing like a star of heaven, comes like "water of the night" (dew). See also W. Farber, Schlaf, Kindchen, Schlaf 62:195, with notes on pp. 63–64.

ki-ma na-al-ši šá kakkabāni^{mcš} ki-ma zal-qí-qí šá a-pa-a-ti ki-ma šik-ke-e la ta-ḥal-lu-pi șir-ra-niš

4R 582 i 18-19 // PBS I/2 113:53

Like dew of the stars, like the breeze of a window, do not slip past the door pivot like a mongoose.

In Enuma Elish, there are at least three heavens: the heaven that belongs to Anu, the Ešarra of Enlil, and the level of the stars. Another cosmic placename, elâtu, occurs in Ee V 11-12 as the region of the moon-god Nanna, and the term ašrata occurs in Ee IV 141 and Ee V 121 as a name for a region of heaven or a feature of heaven (see p. 114). In addition, a number of Sumerian incantations, including me.šè ba.da.dal, may or may not preserve traditions of seven or more levels of heaven (see p. 220).

Outside KAR 307, AO 8196, and Enuma Elish (and perhaps the Sumerian incantations), the heavens can be divided into two regions only: (1) the sky and (2) the region above the sky. In Sumerian literary texts, a region of heaven above the sky belonging to An is called an.šà, and a term an.ùn.na 'lligh Heaven' occurs in both Inanna and Sukkaletuda and the Kassite period Sumerian language work The Duties and Powers of the Gods. In Akkadian texts from the Middle Assyrian period onward, heavens above the sky are called "The Heaven of Anu." Although full geographics of the high heavens are not available, much is known about these heavens from Akkadian texts, such as the fact that these heavens include gates, divine homes, and in Nergal and Ereškigal, a courtyard. The Heaven of Anu and high heavens in Akkadian texts are examined below. A study of parallel materials in Sumerian and bilingual works follows on pp. 247–49.

High Heavens in Akkadian Texts

The Heaven of Anu

In Enuma Elish, KAR 307, and AO 8196, the highest level of heaven belongs to Anu. Elsewhere, this heaven is identified as the "Heaven of Anu" (šamū ša danim; šamū danim). Additional evidence that the Heaven of Anu is the highest heaven is found in The Gilgamesh Epic and The Erra Epic. In Gilg. XI 113–14, gods ascend to the Heaven of Anu in order to escape the terror of the flood on the earth's surface below:

 $^{^2}$ Following is a list of occurrences of the "Heaven of Anu": Gilg Xl 114; Cagni Erra 74:153; JNES 15 134:67; Laessøe Bit Rimki 25 iii 51; Ebcling Handerhebung 30:2 n. 5; E. Ebeling, RA 49 40:5; Šurpu 43:78; W. G. Lambert, AS 16 286 rev. 23, AfO 23 40:15, 41:33; G. Meier, AfO 14 142:41; KAR 83 i 6; STT 23 obv. 17'–18'; Kinnier-Wilson Etana 112:39; SpTU I 1 iii 9; AnSt 10 110:52' n. 14. Note also the possible restoration $[\texttt{MIN}\ (\check{samû})\ {}^{\mathring{a}}a]$ -nu in MSL 13 173 i 16' (Izi A, see p. 229).

ilānu^{meš} ip-la-ļu a-hu-ha-am-ma it-te-eḥ-su i-te-lu-ú ana šamê^e šá ^ca-nim

Thompson Gilg. XI 113-14

The gods became frightened by the flood, so they departed, went up to the Heaven of Anu.

It is logical that gods escaping the flood would move as far away from the earth's surface as possible, so the Heaven of Anu should be the most distant heaven from the earth's surface, the highest level of heaven. In Erra 1, a cosmic $m\bar{e}su$ -tree reaches from the lowest earth, the underworld $(arall\hat{u})$, to the Heaven of Anu through the region of the heavens called $el\hat{a}tu$:

a-li wɨmēsu šīr ilāni^{mcš} si-mat šàr gim-[ri] iṣ-ṣu el-lu eṭ-lu! ṣi-i-ru šá šu-lu-ku a-na be-lu-ti šá ina tam-tim rapaštim^{tim} mê^{mcš} 100(1 ME) bēru i-šid-su ik-šu-[[]du[[] šu-pul a-ra-al-[le-e] qim-mat-su ina e-la-a-ti em-de-tu šamê° šá ^d[a-nim]

Cagni Erra 74:150-53

Where is the mēsu-tree, the flesh of the gods, the emblem of the King of the Univ[erse],

the pure tree, august hero, which is becoming to lordship,

whose roots reach 100 leagues through the vast sea to the depth of the under|world|,

whose crown, in the heavens, leans on the Heaven of [Anu]?

The Heaven of Anu, in this context, must be the highest heaven, since the cosmic *mēsu*-tree apparently stretched from the lowest earth to the highest heaven.

In many sources, Anu shares his heaven with other gods. In KAR 307 30, Anu lives in the highest heavens with 300 Igigi. Lipšur (E. Reiner, JNES 15 134:67) also places Igigi in the Heaven of Anu. In Etana, Etana and the eagle ascend to the Heaven of Anu in search of Ištar and apparently find Ištar's home (see p. 58). Elsewhere, Bit Rimki (Laessøe Bit Rimki 25 iii 51') and a šu.íla (Ebeling Handerhebung 30:1 n. 5) call Gula āšihat šamē danim 'Resident of the Heaven of Anu', and a supplicant calls out to the gods of the Heaven of Anu in Namburbi (E. Ebeling, RA 49 40:5), Divine assemblies take place in the Heaven of Anu in Nergal and Ereškigal (see p. 66) and Šurpu:

ina u4-me an-ni-i ilānu^{mes} rabûtu^{mes} a-ši-bu šamē^{e d}a-nim ina puļvri(ukkin)-šú-nu lip-šu-ru-[ka lip]-šu-ru-ka

Šurpu 43:78

On this day, let the great gods who reside in the Heaven of Anu rellease you and absolve you in their assembly.

In these texts, the Heaven of Anu apparently houses the heavenly pantheon.

Gilgamesh XI and the lists of three heavens in AO 8196 and KAR 307, however, may imply that only Anu and his court lived in the Heaven of Anu,

while other heavenly gods, such as the Igigi, lived in intermediate levels of heaven above the sky. In AO 8196 iv 20–22 and KAR 307 (Source A), Anu is placed in the Upper Heavens, while the Igigi are placed one level below in the Middle Heavens. In KAR 307 "Source B" 300 Igigi are placed in the highest heavens with Anu, and Bel's cella occupies the Middle Heavens. In Gilg. XI 113–14, gods ascend to the Heaven of Anu during the emergency created by the flood. These gods may have included divine refugees from both an intermediate level(s) of heaven, as well as from the earth's surface.

The Development of the Tradition of the Heaven of Anu

The only evidence for the term "Heaven of Anu" before the first millennium is found in a Middle Assyrian incantation:

```
... i-na pa-ni šamê* šamê* šá da-nim e-na x [...
W. C. Lambert, AS 16 288 rev. i 23 (AS 16 286 rev. 23)
... on the "face of heaven," the Heaven of Anu...[...
```

In Enuma Anu Enlil, atmospheric phenomena on the "face of heaven" is seen from the earth's surface (see p. 241), so the Heaven of Anu must be contrasted with pāni šamē if the Heaven of Anu is a high heaven above the stars in this context.

There is evidence for high heavens above the stars in other second-millennium texts, but these texts do not use the term "Heaven of Anu." In the Amarna version of Nergal and Ereškigal, Namtar ascends to the šamê ṣīrūti 'majestic heavens' (EA 357:8) instead of the Heaven of Anu, as in the first-millennium Sultantepe and Uruk versions of the epic (AnSt 10 110 52' n. 14; SpTU I 1 iii 9).

An Old Babylonian example of Anu's heaven is found in the preserved portion of the prologue to Old Babylonian Etana (Kinnier Wilson Etana 30–31), where the emblems of kingship lie before Anu in heaven ($\delta am\bar{a}^2\bar{u}$). Another old example of Anu's heavens may be found embedded in Ee V1 37–44, where 300 Anunnaki are sent to dwell with Anu in heaven ($\delta am\bar{u}/\delta am\bar{a}m\bar{u}$). These 300 Anunnaki may be compared with the 300 Igigi that inhabit Anu's heaven in KAR 307. By the Middle Babylonian period, Igigi rather than Anunnaki are the gods of heaven, so Ee VI 37–44 presumably derives from an Old Babylonian source.³

The Intermediate High Heavens

Intermediate heavens are found between the heaven that belongs to Anu, and the level of the stars in both KAR 307 and AO 8196, as well as in *Enuma Elish*. In KAR 307 (Source A) and AO 8196, a middle heavens belonging to the

³ See p. 5 n. 3.

Igigi is made of *saggilmud*-stone. KAR 307 (Source B) states that the cella of Bel was located in this heaven. In *Enuma Elish*, a region of heaven named Ešarra belonging to Enlil lies beneath Anu's heaven (šamū/šamāmū).

Evidence for High Heavens in Sumerian Texts

an.šà

The term an.šà is translated *qereb šamê* 'the middle of heaven' in Antagal G 226 (MSL 17 227) and the commentary 2R 47 ii 13. In Akkadian and bilingual texts, an.šà and *qereb šamê* often refer to a part of the sky (see pp. 238–39). Nonetheless, evidence in Sumerian texts and the Sumerian portions of bilingual incantations indicate that an.šà is also a name for an interior region of heaven above the stars that may be compared with the Heaven of Anu.⁴

The clearest evidence for an.šà as a high region of heaven above the sky is found in a passage from *The Curse of Agade*, where Anu abandons Akkad for an.šà just as Enki leaves the city for his cosmic region, the Apsu:

me.lám an.né im.ús.sa.a.bi an.né an.šà.ga ba.c.e_{l1} g^gdargul.kù im.dù.dù.a.bi ^den.ki.ke₄ abzu.a mi.ni.in.gíd

Cooper Curse of Agade 52:72-54:75

Its (Akkad's) aura, which leaned on heaven, Anu took up to "Heaven's Interior." Its well firmly planted mooring pole, Enki dragged into the Apsu.

"Heaven's Interior" is also the home of Anu in heaven in Sumerian hymns to Anu's viziers, Baba and Ninšubur (BL 195:4; UET 6/1 72:3; STVC 36:3, 9, 13), TCS 3 38:371, and the Sumerian portion of the bilingual edition of Angimdimma:

ní me.lám an.na an.šà.ta sag.gá.eš mu.un.rig₇.ga pu-luḫ-ti me-lam-me ^da-nu-um ina qé-reb šamê° ana ši-rik-ti iš-ruk-šu Angim 66:70

⁴ No exact Sumerian equivalent of Akkadian šamû danim/šamû ša danim is possible. Both the Sumerian equivalent of šamû and danim are written with the AN sign, and a construct an.an.na would be ambiguous. In Akkadian texts, the two words are clearly differentiated, so the term "Heaven of Anu," as well as the divine-name "Anu of the Heavens," are possible. Note for example danum u dantum ša šamê in Racc. 79:30, and the epithet of Sin "Anu of Heaven" (E. Ebeling, Or 23 213:9). See also CAD Š/1 341 2'; OECT 11 p. 17 nn. 1-2; W. Farber, JNES 49 301.

Sum.: (Ninurta) who was given the fearsome splendor of Anu as a

gift in "Heaven's Interior."

Akk.: Anu granted him fearsome splendor as a gift in the "middle

of heaven."

In these passages, there is no reason to place Anu's home among the stars or at the same level as the sun, moon, and clouds. Thus an.šà here, like the Akkadian Heaven of Anu, must be Anu's region of heaven above the sky.

Other evidence identifies an. šà with a night resting place of the sun. In an

incantation that was to be recited at sunset, the Sun-god enters an .šà:5

dutu an.šà.še ku₄.ku₄.da.zu.dè (dšamuš) ana qé-reb šá-me-e ina e-re-bi-ka gšsi.gar.kù.an.na.ke₄ silim.ma hu.mu.ra.ab.bé ši-gàr ša-me-e el-lu-tìm šul-ma liq-bu-kum gsig.an.na.ke₄ sud₄ hu.mu.ra.ab.bé da-la-at šá-me-e lik-ru-ba-a-kum

Abel-Winckler 59 no. 2 1-6

O Sun-god, when you enter "Heaven's Interior," may the bolt of the clear heavens say "hello." May the doors of the heavens bless you.

In this context, the Sun apparently sets into an.šà after passing through the gates of heaven. In a second incantation, the Sun rises from an.šà:

en.gal an.šà.kù.ga.ta [è].zu.dè
be-lum rabû^a iš-tu qé-reb šamê^c [ellūti i]na a-ši-ka
ur.sag šul ^dutu an.šà.kù.ga.ta [è].zu.dè
qar-ra-du et-lum ^dšamaš iš-tu qé-reb šamê^c (ellūti) ina a-ši-ka
4R 17:1-4

Great Lord, when you rise from clear "Heaven's Interior," hero, youth, Shamash, when you rise from clear "Heaven's Interior,"

Thus, according to one Sumerian tradition, the Sun-god apparently spent the night in an.šà instead of passing under the earth's surface through the Apsu or underworld. It is not clear, though, how the Sun-god might have passed from the western to eastern horizon at night through an.šà.⁶ Thus, it is not surprising

⁵ For the recitation of this incantation at sunset, see Abel-Winckler 60:25 ka-inim-ma-ki ⁴utu^{kam} šd ⁴utu.šú.a ⁴an incantation of the Sun-god at sunset. Note the parallels R. Kutscher, Kramer AV 307:17: ^{gis}si.ga [r an.na.ke₄ silim.ma] hu.[mu].da. gi₄.gi₄; Cohen Eršemma 57 no. 184:8 [ki ^dut]u.è.dè ^dutu.ku₄.ku₄.dè. Note also B. Alster, ASJ 13 51:86, where Utu judges in an.šà. For a study of the sun's movements at night, see W. Heimpel, JCS 38 127-51.

⁶ W. Heimpel concludes (JCS 38 151) that 'heaven's interior' (a.n.šà) "is the invisible part of heaven below the earth. This concept implies the helief that the sun and the other heavenly bodies remained at all times in heaven and did not pass into the realm of

that this tradition posed severe proplems for a later author, who translates an.šà as *išid šamê* instead of *qereb šamê* in a Bit-Rimki incantation:

ÉN ^dutu an.šà.ta è me.l [ám.zu an.dul.la]

^dšamaš ina i-šid šamê° tap-pu-ha me-l[ám-ma-ka šamê° i-kat-tam]⁷

Laessøe Bit Rimki 52:1-2 (cf. 53:15-16)

Incantation: Sun-god, when you rise from "Heaven's Interior" (Akk.: the horizon), [your] sh[een covers the heavens.]

an.ùn.na

In "Duties and Powers of the Gods" (Sumer 4 pl. I ii 6'-11'; see p. 143), an.ùn.na houses Igigi, suggesting that this region is a high, unseen level of heaven. This literary work, however, was written during the Kassite period, so this example of an.ùn.na, cannot prove a third-millennium Sumerian tradition of high heavens. Additional examples of the term, however, occur in the traditional Sumerian literary work *Inanna and Sukalletuda*:8

sig.šè igi mu.íl an.ùn.na kur.utu.è.ke₄.ne igi bí.du₈ nim.šè igi mu.íl an.ùn.na kur.utu.šú.ke₄.ne igi bí.du₈ an.sikil².bad!.rá^{ra} igi mu.ni.du₈ an.bad.rá^{ra} giskim mu.ni.zu

ISET II pl. 9 iii 44-479

He (Sukalletuda) lifted the eye eastwards and looked at the high heaven by the mountain of sunrise. He lifted the eye westwards and looked at the high heaven by the

mountain of sunset.

He gazed at the shining? distant heaven.

In the distant heaven he understood the sign.

Although Sukalletuda sees an.ùn.na by mountains of sunrisc and sunset, an. ùn.na in this passage might still be a region of heaven above the sky, since Adapa is able to see the visible parts of heaven *išid šamê* and *elât šamê* (horizon and zenith) while standing in Anu's heaven in Adapa D:7-8 (Piccioni Adapa 122). Sumerian an.bad.rá 'distant heaven' must be visible from earth in *Inanna and Sukalletuda*, since it provides Sukalletuda with a sign.

earth upon setting." This argument, although appealing, contradicts the many texts where the Sun and Moon are placed in the underworld at night (see, for example, p. 352) and passages where Anu's abode in heaven is placed in an.šà in Sumerian literature.

7 Cf. R. Borger, Or 54 16:11-12: an.ša.kù.ga = šamû ellūtu.

⁸ Note also an.ùn.na in BE 31 27:14-15:

ba dingir.re.e.ne.er mu.ri.in.BU.e.ne an.ùn.na ki íb.ta.sag.ku₅ sag.ku₅,zu x x a mu zu x

⁹ K. Volk (*Inanna und Šukaletuda*, 177) interprets this passage and parallels in a different manner.

The Geography of the High Heavens

Very little is known about the interior of the Heaven of Anu or the other high heavens. The only evidence for the interior of the Heaven of Anu is found in Nergal and Ereškigal and Etana. In Nergal and Ereškigal, the assembly of the gods convenes in a courtyard named kisal anim courtyard of Anu. In this same text, a gate to the Heaven of Anu is named "Gate of Anu, Enlil, and Ea," and this gate is reached by ascending the simmelat šamāmī stairway of heaven':

i-la-a ^{| d}nam[|]-lar ár-kàt ^sisim-me-lat šá-m[a-mi] ana hāb ^ca-nim ^den-líl u ^dé-a ina ka-[šá-di] ^da-nim ^den-líl u ^dé-a e-mu-ru-s|u!-ma]

STT 28 v 42'-44'

d[na]m-tar ana ki-sal-li da-nim e-ru-u[b-ma]

STT 28 v 47'

Namtar ascended the long stairway of hea[ven.] When he arr[ived] at the Gate of Anu, Enlil, and Ea, Anu, Enlil, and Ea sa[w him] (and said...)
"Namtar ente[r] into the courtyard of Anu."

In Etana, Etana and the eagle fly to the Heaven of Anu and enter through the Gate of Anu, Enlil, and Ea, and Gate of Sin, Šamaš, Adad, and Ištar on their way to find a windowless home of Ištar that Etana has seen in a dream (see p. 58). This information suggests that the Heaven of Anu was a great temple complex complete with a courtyard, gates, and shrines to house important gods. Such a tradition may have developed by analogy to the underworld, which also has a courtyard, gates, and divine homes (see p. 350–49). In Adapa, Anu also lives in a high heaven beyond a road to heaven named harrān šamē 'Path of Heaven' and a gate called "Gate of Anu" (see p. 65), but the term "Heaven of Anu" is not used.

Divine Abodes in Heaven

In both Sumerian and Akkadian texts, gods live in the high part of heaven above the sky. In KAR 307 32–33, a dais of Bel is located in the middle heavens. Parallel divine cellas and daises above the sky are found in a number of texts. In bilingual passages, Inanna/Ištar sits on the dais of Anu in heaven: 10

10 Note also another possible bilingual example of the dais of Anu in heaven in TCL 653:17-18 [bá]ra?.an.na.zu = [ina] šamê^{fe} pa¹-rak-k[u].... Note also A. Sjöberg, OrSuec 22 116:8; EWO 74; Ebcling Handerhebung 55:1-2; PSD B 141-42 bára A Bilingual 1; PSD B 145 bára.si.ga Bilingual 1. A heavenly bára may also appear in a lexical list of cosmic terms: an, ul.HE, an.šár, ki.šár, an.úr, an.pa, bára, bára.an.dul, an.bar.Bu.a, an (MSL 11 61 v 155-64). Note also the biblical parallel in 1 Kings 22:19 and Isajah 14:13.

bára nam.lugal.lu.mu.šè gá.na ù.bí.GALAM.GAL.AM^{gagala am} an.ta ^{be}ḫé.gál

ana pa-rak-ku šar-ru-ti-ia ga-na ut-li-li-ma ina e-la-a-tú tíš-hi Exaltation of Ištar 18–19

Come, take yourself up to my (Anu's) royal dais, sit in the "Heights."

[x.bára].nam.lugal.la.an.na.ke4 ul.þé šu bi.in.t[i maḥ.di]
[x]-x pa-rak šar-ru-ut da-nim šamên i-ḥu-uz [tis-qar-tum]

LKA 23 rev. 8'-9' (collated)

[The exalted lady] took hold of the ... of the royal dais of Anu of heaven (Sum. Anu/heaven).

Other passages refer to a solar cella in an unseen portion of heaven above the sky where the Sun-god passes the night. In a Sumerian hymn to Inanna, Inanna as Venus shines in the sky after the Sun enters his cella at sunset:

dutu agrun.na.šè ku₄.ra.a.ba dinanna i.zi.gim an.ta im.gùr.ru.a.zu.dè

BE 31 12 rev. 24-25

After Utu goes into his cella, Inanna, like a fire, you are raised up high.

In parallel Old Babylonian Prayers to the Gods of the Night, the Sun-god enters his cella before the stars come out:

da-a-a-an ki-il-tim a-bi ki-it-tim dšamaš i-te-ru-ub a-na ku-um-mi-šu

RA 32 J81:14-15 (cf. 180:12-13)

The Judge of Truth, Father of Truth, Shamash has gone into his cella.

Earlier, both prayers call the night-resting place of the Sun *utul šamê* 'lap of heaven' (RA 32 180:7, 181:7). In GHT 47-49 and 91-93, Utu leaves his cella when he rises at dawn, and a star apparently rises from a cella at the horizon in Namburbi:¹¹

ÉN mul agrun.ta 「è¹.[a (. . .)] an.úr.ta 「è¹.[a] R. Caplice, Or 39 113:1

Incantation: Star risin[g (...)] from the cella, risin[g] from the horizon.

Other cellas of Ištar, Shamash, and Sin, however, may be partially visible from earth. In an Esarhaddon oracle, Ištar can see Esarhaddon when she sits in

¹¹ Note also O. Gurney, AAA 22 92 i 179-80; Kramer AV 307:9; ELA 132, 204; and the Sagigameš incantation CT 17 19 i 34-39, where the Sun-god sets into a house and then rises the next morning. R. Caplice (OrNs 42 299-305) suggests that agrun is a name for the Apsu in these contexts.

her golden heavenly cella, but the Assyrian king can only see a light of *elmešu*-stone:

I have established your (Esarhaddon's) throne below the great heavens. From the golden cella in the midst of heaven I will keep watch over you. I will make a light of *elnešu*-stone shine before Esarhaddon, the king of Assyria.

4R² 61 iii 29-35; see p. 13)

The light of *elmešu*-stone in Ištar's cella may be compared with the *elmešu*-stone in Bel's cella in KAR 307 33. This, however, is problematic, because the goddesses' throne in the interior of the heavenly cella was not visible from earth. A possible solution to this problem might be that the light inside the cella shone through a window and was therefore visible from earth, while the interior of the cella was not visible. Yet, Etana and the eagle apparently find that Ištar's heavenly cella has no window in *The Etana Epic* (see pp. 50–51). Similar problems arise in a hymn to Sin, where the throne of the Moon-god is located in the *šamû ellûtu* 'clear heavens' (Perry Sin 5a:2–5e:16), and a šu.íla to Shamash, where the Sun-god sits on a dais in the *šamû ellûtu* (KAR 55:1–2; Ebeling Handerhebung 52). Such passages, where the Sun, Moon, and goddess Venus (Ištar) are visible in their shrines even when their shrines are not visible, demonstrate that the visible and non-visible heavens were not always totally separate in Mesopotamian thought.

The Visible Heavens (The Sky)

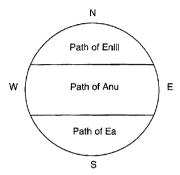
The Heavens of the Stars, Sun, Moon, and Planets

Sumerian and Akkadian texts preserve three systems for describing the geography of the sky. First, Akkadian texts speak of paths of the heavens belonging to the stars and the seven ancient planets (udu.idim = bibbu): the Moon, Sun, Mercury, Venus, Mars, Jupiter, and Saturn. Second, both Sumerian and Akkadian texts refer to a system of dividing the heavens into quadrants that may be compared with the four quarters of the earth's surface. Third, a number of Sumerian terms and their Akkadian equivalents are used as names for various portions of the sky. These include a n.úr = išid šamê 'Horizon' and a n.pa = elât šamê 'Zenith' (see pp. 233-42).

In Mesopotamian texts, no region of heaven exists between the earth's surface and the level of the stars, sun, and moon for lesser astronomical objects such as comets or shooting stars. For example, the term *kakkabu* 'star' applies to meteors as well as fixed stars (see CAD K 48 2).

The Paths of the Heavens. The division of the visible heavens into paths (harrānu) is the most common system in astronomical texts. In these texts, the term usually refers to bands of the sky reaching from the eastern to western horizon. Both "The Astrolabes" and Mul-Apin divide the sky into three stellar

paths that cross the sky from the eastern to western horizon: a northern path belonging to Anu, a central path belonging to Enlil, and a southern path belonging to Ea. The Moon and Sun-gods use similar paths, called "The Path of Sin" and "The Path of Shamash," on their way across the sky:



The Paths of Anu, Enlil, and Ea. The "Astrolabes" and star-catalogue of Mul-Apin (Mul-Apin I i 1—ii 35) list Anu, Enlil, and Ea-stars that travel along the Paths of Anu, Enlil, and Ea over the course of the year. These paths are also mentioned in many other astronomical and astrological texts where, on occasion, the positions of astronomical phenomena are defined in terms of the Paths of Anu, Enlil, and Ea-stars. For example, CT 41 23:10–12 states that a mišhu and a sallummû comet move from the Path of Anu to the Path of Enlil; Parpola LAS I 290 notes that Jupiter has moved from the sector (qaqqaru) of mulsipa. Zi.an.na (Orion) in the Path of Anu to the sector of mulsisgrigir ("The Chariot") in the Path of Enlil; Borger Esarh. 2 i 37—ii 9 reports that Venus and Mars appeared in the Path of Ea; and Enuma Anu Enlil preserves numcrous protases where Venus or other planets stand in one of the three stellar paths: 12

šumma muldili.bad ina sīt šamši u ereb šamši ina harrān šu-ut den-líl izziz-ma ...
[šumma muldili.bad ina sīt šamši u ereb šamši ina harrān šu-ut da-nu izziz-ma ...
[šumma muldili.bad ina sīt šamši u ereb šamši ina harrān šu-ut de-a izziz-ma ...

ACh Ištar 4 10-12

See also E. Weidner, AfO 7 170-78; ACh Jštar 16:13'-15'; ACh Supp. 34:5-7,
 37:34-47; 53:10-15; LAS 1 64 rev. 12, 18, 110+300:5 (LAS II p. 375), 289: 15-16, 290:17,
 rev. 5, 10, 14, 324:3; AfO Beih. 22 224 rev. 14; SAA 8 144: 6, 175:1, 4, 211:1, 323:4, 326:3,
 349 rev. 2; Hallev's Comet 24:16-17.

If Venus at sunrise or sunset stands in the Path of Enlil ...

[If] Venus at sunrise or sunset stands in the Path of Anu...

[If] Venus at sunrise or sunset stands in the Path of Ea...

This demonstrates that Mesopotamian astronomers used the Paths of Anu, Enlil, and Ea to locate heavenly bodies in the sky, just as modern astronomers use degrees of latitude and longitude.

In Mul-Apin II, the location of the Sun in the sky over the course of the year is explained in terms of the three stellar paths:

- From the 1st of Adar to the 30th of Iyar, the Sun travels in the Path of Anu; breeze and warm weat | ber |.
- From the 1st of Sivan to the 30th of Ab, the Sun travels in the Path of Enlil; harvest and heat.
- [Fr]om the 1st of Elul to the 30th of Arahsamnu, the Sun travels in the Path of Anu; breeze and warm weather.
- 7. [From the 1s]t of Kislev to the 30th of Shevat, the Sun travels in the Path of Ea: cold weather.

Mul-Apin II Gap A 1-7 (see p. 173)

Here the Sun is said to travel through the Path of Anu during the spring and autumn seasons, the Path of Enlil in summer, and Path of Ea in winter, demonstrating that the day sky, as well as the night sky, was divided into Paths of Anu, Enlil and Ea.

This system of dividing the sky into Paths of Anu, Enlil, and Ea was well known in the first millennium. References and allusions to the Paths of Anu, Enlil, and Ea are found outside astronomical and astrological works in literary contexts, including Ee V 1–8, a Prayer to the Gods of the Night (A. Falkenstein, AnBi 12 284:43–44), an incantation from Sultantepe (STT 73:92–94), and Assurbanipal's Acrostic Hymn to Marduk and Zarpanitum, where Marduk establishes harrānū 'paths' and mālakū 'courses' in the sky for the constellations (SAA 3 9 no. 2 rev. 8–9). ¹³ Such literary allusions demonstrate that non-astronomers were familiar with the practice of dividing the visible heavens into Paths of Anu, Enlil, and Ea.

The earliest evidence for the Paths of Anu, Enlil, and Ea dates to the second millennium. The final portion of a Boghazkoi version of a Babylonian "Prayer to the Gods of the Night" lists 17 stars belonging to Ea and refers to stars of Ea, Anu, and Enlil (KUB 4 47 rev. 43–48; see p. 158). However, this prayer does not use the term <code>harrānu</code>. The earliest surviving evidence for <code>harrānu</code> itself dates to the late second millennium; the Middle Babylonian "forerunner" to the "Astrolabes" HS 1897 from Jena and the slightly later Middle Assyrian Astrolabe KAV 218 (Astrolabe B; see pp. 158–59). Nevertheless, the fact that stars maintain regular courses must have been observed in very early times.

¹³ Note also AfO 17 89:4-5 (see pp. 146-47); RA 48 8:23; Borger Esarh. 14 Episode 6, cf. BBR 98:41-42.

Although no text ever explicitly states that the Paths of Anu, Enlil, and Ea together comprise the entire sky, this may be inferred from a passage in a Neo-Assyrian Prayer to the Gods of the Night that parallels KUB 4 47:

kakkab dīmšūti (ù l u) dīmiltāni (si.sá) dīmšadē(kur) dīmanurri (mar) šu-pu-tu₄ kakkabānu^{mes} a-hu-tu₄ šá i-ni la i-mu-ru-šú-nu-tú mu-pal-su la mu-pal-su la ip-pal-su-šú-nu-tú šu-ut da-nu al-si-ku-nu-(ši) šu-ut denlil (50) na-as-hu-ra-ni šu-ut de-a gi-mir-ku-un pu-uh-ra-ni

A. Oppenheim, AnBi 12 283:40—284:44
Star of the north, south, east, and west,

Star of the north, south, east, and west, brillant stars, others which the eye has not seen, which observers or non-observers have not observed, those of Anu, I cry out to you. Those of Enlil turn to mc. Those of Ea, all of you, gather around me.

In this context, all of the visible stars in heaven seem to be included among the stars of Anu, Enlil, and Ea.¹⁴ The stars that have not been seen are probably

¹⁴ Note a nearly identical passage in STT 73:92-94. The Paths of Anu, Enlil, and Ea may also be said to comprise the entire heavens in two obscure passages in *Enuma* Anu Enlil:

mulé.tùr.ra dím.ma.an.na [du₁₁.ga] a-na nap-lur šumê* DíM : na[p-ḥa-ru (.)] a-na bi-nu-ut šamê* i-qab-bi

BPO 2 42:22-22a

The "Cattle-pen"-star, all of Heaven [so it is said] for all of Heaven. DIM means tot[ality (...)], so it says, for the creatures of heaven.

harrān ^dšamaš še-pi-it tarhaṣi(tùr) šu-ut ^ācu(diš) ljarrān ^dšamaš mļi-šil ta]rhaṣi šu-ut ^aa-nu ljarrān ^dšamaš rēš bīt tarhaṣi(ć.tùr) šu-ult ⁴en-ld...

BPO 2 42:24b

The Path of the Sun at the foot of the cattle-pen belongs to Ea. The Path of the Sun in the mliddle of the calttle-pen belongs to Anu. The Path of the Sun at the head of the cattle-pen belongs to Enlil . . .

In the first passage, the entire heavens (naphar šamé) seems to be a cattle-pen for the creatures of heaven (i.e., the stars). In the second passage, the cosmic cattle-pen seems to be divided into thirds, with each third representing one of the three astronomical paths. The Path of Ea in the south is at the bottom, the Path of Anu in the center of the sky is in the middle of the cattle-pen, and the Path of Enlil in the north is at the top of the cattle-pen. However, a parallel places the Path of En at the top of the cattle-pen and the Path of Enlil at the bottom (see BPO 2 43 n. 24b). The Path of the Sun crosses into all three paths, as in Mul-Apin II (see p. 173). As noted by W. Heimpel (Fest. Sjøberg 249–52), the cattle of the sky in this context, as in Sumerian literature, are the stars. If so, the identification of the "cattle-pen" with only the eastern horizon in BPO 2 p. 17 2.2.1.2.1 must be abandoned, since stars are found throughout the sky. For a further reference to stars behaving like cattle in The Exaltation of Istar, see p. 145. For a previous study of the cattle-pen (viehhof) of the stars, see Koch Neue Untersuchungen 119–32. The image

lesser stars that are not very bright or stars that have yet to rise or already set. Although unseen, the powers of such stars could still have been helpful.

Astronomical Lines of Latitude, Meridians, and Stellar Sectors. The Paths of Anu, Enlil, and Ea themselves were divided into stellar zones. On the circular Astrolabes, the sky is divided into 36 zones by "latitudinal lines" marking the borders of the Paths of Anu, Enlil, and Ea and "longitudinal meridians" marking the beginnings and ends of the months. In Ee V 1–8, Marduk draws miṣrātu 'boundary lines' when he arranges the stars of the "Astrolabe" in Ee V 1–8.

Grids of heavenly lines and meridians, such as those drawn on the circular Astrolabes, establish stellar sectors in the sky. Evidence for such stellar sectors is found in *Mul-Apin* and other texts from the first millennium where the terms *qaqqaru* 'area' and *pirku* 'sector' refer to areas of the sky surrounding important stars. Likewise, in the late period the positions of the stars of the zodiac and normal stars were used to define sectors of the sky called ha.la = zittu.¹⁵

The Paths of the Moon, Sun, and Planets. The Moon, Sun, and planets move over the course of the year in relation to the fixed-stars. Both the terms Path of Sin and Path of Shamash, like the Paths of Anu, Enlil, and Ea, refer to fixed bands in the sky. In Mul-Apin I iv 31–39, the closing section of Mul-Apin I, the Path of Sin (harrān dsîn) is explained in terms of 18 stars (see p. 171). According to this list, the Moon moves through the stellar paths in the annual sequence Anu-Enlil-Anu-Ea-Anu. The term Path of Shamash (harrān dšamaš) occurs as a fixed band in the sky in astronomical reports and omens where stars reach (kašādu) the Path of Shamash at night (i.e., enter into the course that the Sun follows during the day). Likewise, in Ee V 21–22, the Moon-god is commanded to approach (šutaqrib) the Path of Shamash on the last day of the lunar month (tim bubbulim), where neither the Sun nor Moon is seen in the sky at night.

The opening section of Mul-Apin II identifies the Path of Shamash and the paths of the planets with the Moon's path:

¹⁶ See E. Weidner, AfO 7 175–77; SAA 8 49 rcv. 4, 230:5–6; BPO 2 39 n. II 13b, SpTU I 90 rev. 8.

of the starry sky as a cattle-pen may provide indirect evidence that the sky was perceived as a dome. The original pictograph of the TÜR (cattle-pen) sign includes a dome-shaped element (see Labat 87a), suggesting that some cattle-pens had dome-shaped roofs that might have been compared with the apparent dome of the sky. For the "head" and "foot" of the sky, see also CAD \$\tilde{S}/2\$ 294 e.

¹⁵ For qaqqaru = 'stellar sector', see p. 166; SpTU J 94; AfO Beih. 22 219 EAE 20 Text a, 285:29. Compare also the later 12 ha.la = zittu 'parts' of the microzodiac (AfO Beih. 22 39 n. 24; F. Rochberg-Halton. JAOS 108 57-60). For boundary lines and meridians in the sky, compare also TCL 6 14 37-rev. 4 where planets stand (are stationary) on tallu 'dividing lines', DUR (= riksu, turru) 'bands, ropes', and MISìR (perhaps a writing for mişir, see A. Sachs, JCS 6 74). Compare also DUR in TCL 6 13 ii 7-8, rev. ii 1-20 (F. Rochberg-Halton, ZA 77 212-15, cf. 222-24). Lines are also established in the sky by opining stars to form qû 'ropes' in BM 78161 (D. Pingree and C. Walker, Fest, Sachs 313-22). For tallu and zittu on sundials, see F. Rochberg-Halton, Centaurus 32 164-65.

The path which the Moon goes in, the Sun goes along. The path which the Moon goes in, Jupiter goes along. The path which the Moon goes in, Venus goes along. The path which the Moon goes in, Mars goes along. The path which the Moon goes in the planet Mercury. whose name is Ninurta, goles alongl. The path which the Moon goes in, the planet Saturn goes along. Mul-Apin II i 1-6 (see pp. 171-72)

The Moon's Path is itself defined by the 18 stars in the Path of Sin in the immediately preceeding closing section of Mul-Apin I. Thus, the paths of the Sun and the five modern planets in Mul-Apin II, like the Path of Sin in Mul-Apin I, crosses the boundaries between the Paths of Anu, Enlil, and Ea. Later in Mul-Apin II, the Sun is said to travel in different stellar paths during different seasons of the year (see pp. 172-73).

In a few other texts, the paths of the Sun, Moon, and planets are called tālaktu 'course' or mālaku 'way' rather than harrānu 'path'. Parallel terms "Way of the Moon" and "Way of the Sun" occur in Late Babylonian astronomical texts (ACT 200 i 20; O. Neugebauer and A. Sachs, JCS 21 202 rev. 23–24, cf. 201 8, 15, 20), while the courses of the Sun, Moon, and planets are called tallaktu in E. Reiner and D. Pingree, AfO 25 52 rev. ii 1, 13. In Assurbanipal's Acrostic Hymn to Marduk and Sarpanitum, both "ways" and "paths" of constellations reach from east to west:

ina sītaš (GIŠ.NIM) u šīlān (GIŠ.SÚ) lu-maš-ši uš-[ziz-ma] har-ra-nu ma-la-[ku i|š-ruk-šú-nu-ma ú-[$x \times x \times x$ | Craig ABRT I 32 rev. 9 (SAA 3 9)

In the east-sky and west-sky he set up the constellations. provided them with paths and way[s], and . [......]¹⁷

On other occasions, however, harrānu seems to be used with the sense of the course of the Sun or planets in the sky at a given time, rather than a fixed band of the sky. For example, cloud formations (nīdu) stand in the "Path of the Sun" in two of four omens in Thompson Reports 182 (= SAA 8 401) and the path of the rising Sun in a third: 18

DIŠ 20 KUR ina harrāni (kaskal)-šú ni-du ŠUB.MEŠ Thompson Reports 182 rev. 1 (SAA 8 401)

If the Sun rises (and) cloud-formations lie in its path.

The Shape, Length, and Width of the Astronomical Paths. In the "Astrolabes" and Mul-Apin, it is assumed that the paths of the stars are circles, with

¹⁷ giš = $šam\hat{u}$, sec pp. 229-30.

¹⁸ For the Path of Shamash, Path of Sin. and the planets, see also F. Weidner, AfO 7 175-78, SpTU 1 100:8' (Path of Mcrcury), Livingstone 24:24 (quotes Ee V 21-22), SAA 8 55: rev. 7-8. For "The Path of the Sun" in Gilg. IX, see pp. 98-99.

stars returning to their original positions each year. Thus each path should consist of 360 degrees. As noted on p. 186, this may be confirmed for the Path of Enlil in both the ziqpu-star text BM 38369+ and the blessing formula from Sultantepe, STT 340:12. In the Neo-Assyrian astronomical text AfO 25 52 rev. ii 1-4, the daily course (tālaktu) of the Sun is also described as a circle (see pp. 190-91). In AO 6478, the Path of Enlil is 364 degrees long, instead of 360 degrees, but this slight anomaly reflects the author's intention to provide a better approximation of the true astronomical year of 365¼ days (see p. 185). Nevertheless, there is no direct statement in any surviving text that circles of the Paths of Anu, Enlil, and Ea, or Sin and Shamash, extended beneath the earth's surface, although this may be inferred from ziqpu-star texts, where the Path of Enlil is 360° or 364° long, and from Astrolabe B Section D, where most of the Anu, Enlil, and Ea-stars rise on the eastern horizon six months (180 days = 180°) after setting on the western horizon.

The width of the "Way of the Moon" (mālak dsîn) is provided in late astronomical texts. In ACT 200 this figure is said to be 12 degrees:

epēšu $(du)^{s0}$ šá NIM u SIG ša sîn(30) arha(áb) ana arhi(áb) 12 DAGAL mu-luk dsîn(30)

ACT 200 i 20 (cf. SpTU I 94 20-21)

The procedure for (determining) the positive and negative latitude of the Moon month by month. 12 (degrees) is the width of the "Way of the Moon."

An equivalent measurement in cubits (6 kúš) is provided in parallel texts (JCS 21 201:8, 15, 20; JCS 21 202 BM 33739 rev. 2). This total of 12° represents the maximum north–south deviation of the course of the Moon over the 18-year lunar cycle. 19

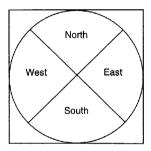
Only the length of the Path of Enlil is measured in surviving texts. In the *ziqpu*-star text AO 6478, *ziqpu*-stars that circumambulate the Path of Enlil travel 655,200 leagues (see p. 186).

The Movement of Heavenly Bodies. No text explains in detail how the stars, Sun, Moon, and planets move through the sky. In KAR 307, the stars are said to be inscribed upon the lower jasper heavens. As noted on p. 15, stars inscribed onto the stone floor of heaven would not have been able to move independently. Thus, the author of KAR 307 may have explained that stars appear to move in the night sky because the entire sky rotated. Such a cosmographic belief could not explain the independent motion of the Sun, Moon, planets, comets, or shooting stars, nor could it explain why circumpolar stars remained above the horizon throughout the year while other stars rose and set. ²⁰

²⁰ See B. Alster, ASJ 13 30-31 for a team of four lions that apparently pulls the chariot of Utu across the sky.

¹⁹ For 1 KúS = 2°, see CAD A/2 74 ammatu A i. For further discussion of the astronomical mālaku, see ACT pp. 191–93 and JCS 21 203–5.

The Four Quadrants of Heaven. The tradition of the four quadrants of heaven parallels the tradition of the four quadrants of the earth's surface. This tradition in heaven is illustrated by Mul-Apin II i 68–71 (see pp. 172–73), where the constellations Ursa Major, Piscis Austrinus, Scorpio, and the Pleiades are said to lie across the north, south, east, and west winds. Other examples of this tradition include Surpu II 165–67 and Prayers to the Gods of the Night, which refer to stars of the four winds (A. Oppenheim, AnBi 12 283:40; OECT 6 75:16). A diagram of the four quadrants of heaven may be found on BagM Beih. 2 no. 98 where triangles labelled "Southwind" and "Westwind" are placed in the corners of a square above and below the label "sunrise." The placement of these triangles suggests that the four quadrants of the heavens were equal triangles rather than four equal squares (see p. 194).



The tradition of the four quadrants of heaven may also be illustrated by two Sumerian passages where Venus shines in the sky. In a hymn to Inanna, the goddess is said to shine in ub.an:

nam.dingir.zu ^dnanna ^dutu.gim an.kù.ge dalla.è izi!.gar.zu ub.an.na zalag.ge kúkku zalag.ge.éš gar A. Sjøberg, ZA 65 198:209-10 (cf. 206 n. 210)

Your divinity, like the Moon and Sun, is resplendent in the clear heavens.

Your torch shines in the "Corner of heaven", turns darkness into light.

The Duties and Powers of the Gods preserves a parallel passage, with an .u b instead of ub.an:

 21 For the four winds in astrology, see AfO Beih. 22 57–60. Note also SAA 8 334–35 and Sachs-Hunger Diaries I 118 -372:11:

iš]tu MURUB4 šanie una S[I... fr]om the "center of heaven" to the nor[th...'

d*bēlet*i.li an.na diri.ga.aš ki.a sìg.ge.dam an.ub.ta da.gan líl.da ba.tab.ba...

Sumer 4 pl. IV vii 19'-29'

So that Venus would waft in heaven, to make her go down in "earth", to make her burn from "Heaven's Corner" through the entire atmosphere? \dots 22

The term an ub also also occurs in *The Kesh Temple Hymn* paralleling ki.ub: g̃á.nun g̃á.ra.bi an ub ki.ub (TCS 3 173:96).

Both ub.an and an.ub are probably variations of Sumerian names for the the four quadrants of the earth's surface, an.ub.da.límmu.ba and ub.da.límmu.ba. The term an.ub is formed on the same pattern as an.úr, an.pa, and an.šà, while ub.an is similar to the term ub.da.an.ki, which occurs in two Sumerian hymns see p. 299). A related Akkadian geographical term, kippat šār erbetti 'Circle of the Four Winds', occurs in an epithet of Adad and The Tukulti-Ninurta Epic (see p. 206; CAD K 399 kippatu 3d). 23

A number of other passages demonstrate the close affinities between heavenly and earthbound geography. These include Sargon Geography 31, where Sargon rules all the lands sihip šamê 'under heaven' (see p. 86); passages in first millennium royal inscriptions where kings claim dominion from "horizon to zenith" (see p. 330); and the Sumerian phrase mul.mul.kur.kur. ra 'stars of the lands', which occurs in an incantation (LKA 145:4 // AMT 104:19).

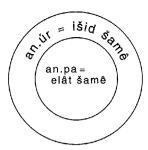
Parts of the Sky. A repertoire of equivalent Sumerian and Akkadian terms are used as names for parts of the sky. These terms, including Sumerian an.úr, an.pa, and giš.hé, and their Akkadian counterparts išid šamê, elât šamê, and šupuk šamê, are examined on pp. 233-42. The repertoire of terms represents a traditional means for expressing the geography of the heavens, rather than a scientifically based system, and as such does not refer to well-defined parts of the sky.

The "Atmosphere." The area between the stars and earth's surface is not considered a separate level of the universe in KAR 807. Other texts, however, demonstrate that this space is a part of heaven, and there is some evidence that this space had its own geography and perhaps even a Sumerian name.

Two Assyrian texts speak of kippatu 'circles' of the winds, which may be compared with the kippat šamê 'circle of heaven' and kippat hurūmē 'circle of

²² For Iíl as a possible name for the atmosphere, see below. The verb sìg is understood as a phonetic variant for sig with the general meaning šapālu 'to be low, to go down'. For tab = hamātu 'to glow, to burn', see CAD H 64.

²³ The division of the heavens into eight sectors is attested in the planisphere CT 33 10 (Koch Neue Untersuchungen 56-61). Cf. Lugalc 77 and CAD S/2 136 šāru A2 for Lyon Sar. 10:66, 17:82.



the sky' in heaven.²⁴ In the inscriptions of Shalmaneser III, Adad is said to hold the *kippat šārē* 'circle of the winds' (J. V. Kinnier Wilson, Iraq 24 93:4). In *The Tukulti-Ninurta Epic*, the Assyrian king excercises control over the *kippat šār erbetti* 'circle of the four winds' (Machinist TN Epic 66 1A:13). This 'circle of the winds' may be illustrated by the circle enclosing the square with triangles labeled "Southwind" and "Westwind" on BagM Beih. 2 no. 98.

Sumerian 11 may be used as a name for the level of the winds between heaven and earth. In *The Duties and Powers of the Gods*, the glow of Venus in heaven seems to shine in 11:

...an.ub.ta da.gan líl.da ba.tab.ba Sumer 4 pl. IV vii 25'–29' (see p. 260)

... to make her (Venus) burn from "Heaven's Corner" through the entire atmosphere $\langle P \rangle$

This sense of 111 also fits the name of the god Enlil, perhaps literally 'lord of the open space'. Enlil, as the ruler of the earth's surface, would have been responsible for the open space above his region.

The source of winds is never fully explained in Mesopotamian texts. One possibility is that winds were believed to issue out of the heavens and underworld and then to blow into Mesopotamian from the edges of the earth's surface. Wind-blown demons come from heaven and the underworld, and winds are said to blow in from an.úr 'the horizon' in an "Incantation of the Wind" (OECT 5 23:1-4; see p. 204).²⁵

²⁴ For kippatu in cosmic contexts, see CAD K 399 and J. V. Kinnier Wilson, Iraq 24 100–101.

²⁵ Note, for example, the opening lines of *The Moon-God and the Demons*, where wind-demons are born in ul.hé = $\tilde{s}upuk$ $\tilde{s}am\hat{e}$ (CT 16 19 i 1-5). In the World Map of Claudius Ptolemy, winds blow from an area beyond a cosmic ocean that extends to the ends of the earth's surface. For a reproduction of this map, see E. I. Stevenson (ed.), *Ceography of Claudius Ptolemy*. In the *Book of Enoch*, portals and treasuries of the winds are found at the ends of the earth (see Charles Apocrypha II *Enoch* 18:34-36, 41, 76.

The Composition of the Heavens

There are two traditions concerning the composition of the heavens. According to one tradition, the heavens are made of water. In the second, the heavens are made of stone.

Water

Explicit statements that the heavens are made of water are found in Babylonian texts. Examples include Ee IV 137-46, where Marduk builds the heavens out of part of the watery corpse of Tiamat, and Inamgišuranki, where the Akkadian name for heaven, šamē, is explained as ša mē of water (Livingstone 32:6; see p. 224). In Ee IV 139-40, Marduk stretches out a skin and assigns guards to keep the waters of heaven from draining downward onto lower regions of the universe. These traditions may be compared with Genesis 1, where the primeval waters are divided in two, with the upper waters positioned above the firmament (מְקִינוֹ), and Psalms 104:3 and 148:4, which speak of waters above the heavens.

The tradition of watery heavens almost certainly derives from the observation that waters fell from the heavens in the form of precipitation. This observation is reflected by close connections between Sumerian and Akkadian names for heaven and words for 'rain'. In Sumerian, the word for 'rain' seg is written with a diri-compound that includes the Sumerian name for heaven, a nana AAN ('water of the sky') (see CAD Z 160-61). As noted earlier, Akkadian sama 'heavens' (plural) is related to a common word for precipitation sama/samam/sami^um, pl. sami^atu, samatu.

The phenomenon of rainfall is explained in different ways. In the Lamaštu incantation $4R^2$ 58 # PBS I/2 113, dew is connected in some way with the stars (see p. 244). In Sumerian texts, rain issues out of cosmic teats called ubur.an.na 'teat of heaven', which serve as rain duets in the sky. In a royal hymn to Rim-Sin, the opening of these duets results in rainfall:

```
ubur.an.sud.ága gál hu.mu.ra.ab.tag<sub>4</sub> seg<sub>5</sub>(1M.A).an.na
hu.mu.ra.ab.šèg
```

UET 6/1 102:23 (Steible Rim-Sin 6)

May he open the teat of the *elmešu* heavens, may he make the rain of heaven rain down.

Because sud.ága = elmešu (see CAD E 107), the surface of the heavens appears to be made of elmešu-stone, and rain water may be stored in reservoirs above.

Additional examples of the "teat of heaven" are found in the Vase Inscription of Lugalzagesi (BE I/2 87 iii 27–28), a Rim-Sin inscription (RIM 4 272:6), a hymn to Nanna (A. Sjøberg, ZA 63 32:24), and a passage in a hymn to Enki:

```
ubur.an.na.ke4 g̃ál ḫu.mu.na.ab.tag4[ . . . ] huru<sub>14</sub>.bi
ḫé.na.[ . . .
A. Sjoberg, JCS 29 31 B i 7 (photo ZA 63 50 no. 2)
```

May he open the "teat of heaven" for him, may he ... the harvest [...

In this last passage, the opening of the "teat of heaven" apparently provides rain for the harvest. Thus, the "teat of heaven" seems to provide life-sustaining rain waters, just as human and animal teats provide mother's milk.²⁶

Sumerian ubur.an.na may have an Akkadian equivalent Some examples of the term serret same, translated by CAD 135 4 as 'lead-rope of heaven', may in fact represent serret same 'breasts of heaven', with serret understood as a plural construct of serret breast' written with doubled r (note, for instance, Ee I 85 ser-ret). Examples where the meaning 'breasts of heaven' is more appropriate than 'lead-rope of heaven' include passages in an Agum II inscription and a late hymn to Marduk: serret0.

```
șer-re-et šamê* rap-šu-ti li-ip-pé-ta-šú er-pé-tu zu-un-na li'-[...]
5R 33 vii 16-21 (Agum II)
```

Let the breasts of the broad heavens be opened for him, let the clouds . [. . .] the rain.

```
[mu-šá-a]z-nin na-al-ši ina şer-ret šá-ma-mi
[x x ] x šá-a-ri ti-iq me-e e-lu qar-ba-a-ti
```

W. Lambert, AfO 19 61:9-10

[Who ra]ins down dow from the breasts of heaven, [..]. wind and raindrops over the fields.

Stone

The tradition that the heavens are made of stone is found in KAR 307 and AO 8196, where the floors of the three heavens are made of <code>luludānītu</code>-stone, <code>saggilnud</code>-stone, and jasper, and the Rim-Sin hymn that refers to <code>elmešu</code>-stone heavens (Steible Rim-Sin 6:23; see above). The tradition of stone heavens may derive from an observation that certain heavenly objects were the same color as minerals. For instance, Sirius shines like copper in the inscriptions of Tiglath-Pileser I (AKA 140:15), and a shooting star is said to shine like <code>zagindurû</code> (lapis or lapis-colored glass) in astronomical omens (S. Langdon, Babyl. 7 233:20–21). The identification of astronomical bodies with stones, although probably originally based simply on color, may have lead to a tradition that the heavens themselves were composed of stone. Such a belief might have been confirmed by finding stone meteors that fell from the sky. ²⁸

²⁶ Note also Gudoa Cyl. B iv 8–9: im.ma.al.an.na.ke₄ ubur si ba.ni.íb.sá 'On the cow of heaven she set the udder aright' (see Jacobsen Harps 428 n. 14).

²⁷ For serret šamê/šamāmi, see also BWL 126:17, 318 nn. 17, 18 (Shamash Hymn); MSL 2 99-101; TCS 3 116-17 n. 332; AHw 861 petû N 5; E. Reiner, Astral Magic in Babylonia, 59; Van Soldt Solar Omens 66 note to line 14'; and see W. Farber, JNES 49 316-17 4.5: 3 for variants MUL šamāmi/[MU]L.MEŠ šamāmi/şer-ret šamê (here translated 'the Milky Way').

²⁸ For falling stars reaching the carth's surface, see Oppenheim Dreams 283. For a study of meteorites and meteoric iron, see J. Bjorkman, Meteors and Meteorites in the Ancient Near East, 110-18; and R. Chadwick, CMS 3 161-70. In Sumerian texts, the heavens themselves may be compared with the blue color of lapis-lazuli. The tablet dub mul.an "Tablet Stars of Heaven," which may have been an early star chart, was made of lapis-lazuli (see pp. 166-68).

The Size of the Heavens

Mesopotamians believed that the heavens were extremely broad and high. In many contexts, the heavens are said to be vast (dagal = rapšu), and a number of texts make it clear that the heavens extended over the entire earth's surface. Twice, in Etana and in AO 6478, the immense size of heaven is expressed in measured units. In Etana, Etana and the eagle fly upward for six leagues without reaching the top of the heavens, and AO 6478 states that a circumnavigation of the Path of Enlil entails a voyage of 655,200 leagues (see p. 186). In CT 46 55, an even larger figure of 1,432,000 is recorded as the distance between asurrakku and earth, but the meaning of asurrakku in this context is not certain (see pp. 178-79).

The Shape of the Heavens

The visible heavens were thought to be circular in shape, since the clear sky appears to be a giant circle. Textual evidence for this belief is found in the terms *kippat burūmē* `circle of the sky' (see pp. 226–27) and *kippat šamē* `circle of heaven'; the latter occurs in two hymns to the Sun-god:

za.e zálag.ga.ta sag.kul sù.da an.na.ta at-la-ma nu-ur-šú-nu šá kip-pat šamê* ru-qu-ú-tu₄ 4R 19 no. 2:51-52

You are their (mankind's) light in the circle of the distant heavens (Sum. distant bolt of heaven)²⁹

[muš-te-š]ir nišē ^{meš} šá kip-pat šamê^e [at-ta] K. 2830:3 (Gray Šamaš pl. III, Bit Rimki)

[You are the direc]tor of people in the circle of heaven

Further evidence for the circular shape of the sky may be found in the circular shape of Assyrian planispheres (CT 33 10-12), the circle enclosing the winds in BagM Beih. 2 no. 98, and the terms *kippat šārē* 'circle of the winds' and *kippat šār erbetti* 'circle of the four winds' (see p. 260).

Although the clear sky seems to us to be shaped like a dome, rather than a flat circle, there is no direct evidence that ancient Mesopotamians thought the visible heavens to be a dome. Akkadian *kippatu* are always flat, circular objects such as geometric circles or hoops, rather than three dimensional domes. Nonetheless, evidence for dome-shaped, or curved, heavens may be found in the *ziqpu*-star text BM 38693+, the blessing formula STT 340:12, and AO 6478, where the Path of Enlil is 364° long. All three imply that the Path of Enlil, at least, is a curved band that encircles the earth's surface (see p. 258). However,

²⁹ gisag.kul = sikkūru 'bolt' (see CAD S 256).

this does not prove that the surface of heaven is curved, since stars need not have necessarily traveled along the surface of the sky.⁵⁰

There is also no direct evidence for the shape of the high unseen heavens, although it is likely that these levels too were thought to be circles. A cryptic reference to the possible circular shape of the Heaven of Anu may be found in a \sin a where the Heaven of Anu is identified with a nignakku 'censer' (Ebeling Handerhebung 14:16). Censers were flat, round objects.

The Bonds of Heaven

A number of texts refer to cosmic bonds, including 'bonds' (riksu, markasu), 'lead-ropes' (serretu), and the durmāļu ('great bond'), which secure the heavens in place. The most complete explanation of how the heavens are secured is found in Ee V 59–62 (see p. 119). Here Marduk twists Tiamat's tail into the durmāļu, and uses this durmāļu to keep the heavens in place over the earth's surface and Apsu. Then, Marduk uses Tiamat's crotch as a wedge to hoist the heavens upwards and keep the heavens from falling. Later in Ee V 65–68, Marduk secures the riksu 'bonds' of heaven and earth and fastens serretu 'lead-ropes', which he hands to Ea in the Apsu. These lead-ropes may be tethered to higher regions of the Universe, and Ea, the lord of the bottom region in Enuma Elish, may hold these lead-ropes to keep the higher regions from floating away. St

Although it is not certain how the apparatus described in Ee V looked when it was fully operational, it is likely that it had the appearance of a lattice of rope work, with the *durmāḥu* as its central axis. This *durmāḥu* may have been a thick reed bundle, since a "reed" *durmāḥu* is listed in Urra VIII:

```
gi.dur.mah = ŠU-ħu (durmāħu)
gi.dur.mah = gir-ri-gu-u
gi.dur.gal = MIN
```

MSL 7 19:186-88

Both the gi.dur.mah and gi.dur.gal, according to their etymologies at least, should be large objects made of reeds.³²

30 For a possible drawing of a dome vault of the sky at Mari, see W. G. Lambert, Or

54 202. See also p. 256 n. 14.

s¹ Note also the parallel in A. George, Iraq 48 134 B 8–9 (see p. 120). For further examples of markasu, see CAD M/I 283 4, and perhaps also Kinnier Wilson Etana 66:10 (cf. 64 I/G 2). For serretu, see CAD Ş 135 ab, W. C. Lambert, Kraus AV 196:2, SAA 3 121 K. 5708a 6′, and Erra IIId:3. Note also the turru 'bond' in Ee VII 80; Maqlu 23:33; Cohen Canonical Lamentations 154:17, with dupl. pp. 172–73; and Ugaritica V 32:20′. Another example of Marduk lifting heaven upward may be found in Ludlul Bel Nemeqi. CAD N/2 89 2′ understands the parallel lines Ludlul Bel Nemeqi I 9, 11: (4marduk) ša nagbi qatēšu la inaššū šamārū (BWL 343 // D. J. Wiseman, AnSt 30 102) as explaining that Marduk's hands hold up the heavens: "from the depth, do his (Marduk's) hands not hold up the heavens?" However, a more likely translation of the line "(Marduk) whose full hands the heavens cannot bear" is suggested by a bilingual parallel (see BWL 344 n. 9).

32 For the bonds of heaven and earth, see also George BTT 261-62; CAD \$/2 381:

seams (šibītu) of heaven and earth.

The Gates of Heaven

The Moon, Sun, stars, gods, and others pass through gates³³ when entering and leaving the heavens. Gates occur in both Sumerian and Akkadian texts and lead into both visible and nonvisible levels of heaven.

Gates to the High Heavens

Gates to the high heavens are found in Adapa, Nergal and Ereškigal, and Etana. In Adapa, Adapa travels along the harrān šamê 'Path of Heaven' to the Gate of Anu, where he finds the gods Tammuz and Gišzidda guarding the gate (see p. 65). In Nergal and Ereškigal, the simmelat šamāmī 'Stairway of Heaven' leads to the Heaven of Anu by way of the Gate of Anu, Enlil, and Ea (see p. 66). In Etana, Etana and the eagle enter the Heaven of Anu by passing through the Gate of Anu, Enlil, and Ea, and the Gate of Sin, Šamaš, Adad, and Ištar (see pp. 50–51).

Gates to the Visible Heavens

In numerous Akkadian and Sumerian texts, the Moon, Sun, Venus, and the stars are said to pass through heavenly gates. As these astronomical bodies rise or appear in the sky, they are said to enter the heavens through gates. Conversely, as they set or disappear, they leave the heavens through gates. For instance, in an *ikribu*-prayer to Sin, the Moon-god opens the door of heaven when he appears in the sky (S. Langdon, RA 12 190:3); Adad thunders by the gate of the Moon in SAA 8 119:5; the opening of the *abulli ša šamê rapšūti* 'gate of the vast heavens' allows stars and constellations to take their places in the night sky in a Prayer to the Gods of the Night (OECT 6 74:10–75:17), and Venus is said to open the bolt of heaven in a bilingual hymn (Cohen Eršemma 132:21). A gate of Ištar also occurs in a broken context in an astronomical diary (Sachs-Hunger Diaries 1 106 -373 rev. 17'). In *Enki and the World Order*, the weather-god Iškur, rather than the Sun, Moon, or Venus, is charged with opening the bolt of heaven (Benito Enki 102:313; see p. 143). Thus, clouds, winds, and other atmospheric phenomena can also enter the sky through gates.

The gates to the visible heavens are probably to be located at the castern and western ends of the sky, where the Sun rose and set. In Old Akkadian cylinder seals, the Sun-god is depicted as rising through a gate by mountains that may be identified with the mountains east of Mcsopotamia (see RlA 7 531 "Māšu"). In Ee V 9-10, the gates and bolts of heaven are placed on the right and left sides of heaven.

³⁸ For gates and gate-parts of the heavens, see W. Heimpel, JCS 38 132–40; F. Rochberg-Halton, JNES 42 214; CAD Š/1 344, Š/2 410; and n. 34 below. For recent studies of gates and gate-parts, see J. Scurlock, Or 57 421–33; E. Leichty, JCS 39 190–96.

Parts of the Gates of Heaven

A number of passages refer to parts of the heavenly gates. Examples include the "Door of Anu" in *The Exaltation of Ištar* (see pp. 144–45), a Sin-Iddinam cone where Utu opens the <code>gišsi.gar.an.na</code> 'bolt of heaven' (RIM 4 167:3), and a passage in *Bit Rimki* where the sun lifts the key-peg of the bolt in heaven's gate: ³⁴

g^ssi.gar an.kù.ga.ta g^skak nì.kak.ti te.gá.da.zu.dè ina si-gar šamê^e ellüti^{mes} sik-kat nam-za-qí ina šu-li-i-ka 4R 17:5–6 + duplicates (see CAD N/1 256 namzaqu bil. section)

When you lift the peg of the key from the bolt of the clear heavens.



Approaches to the Gates of Heaven

There are three ways to reach the gates of heaven in Akkadian literature. First, it is possible to fly to the gates from the earth's surface, like Etana and the eagle. Second, it is possible to take a road, like Adapa. Third it is possible to climb a stairway like the simmelat šamāmī 'Stairway of Heaven' in Nergal and Ereškigal. The Sun may use a similar stairway in an Old Babylonian prayer where Shamash opens the dalat šamê 'doors of heaven' and ascends a lapislazuli stairway (Starr Bārū 30:9/RA 38 87:10–11; see p. 66). Another reference to a ramp or stairway of some sort may be found in a Nabonidus inscription that calls the wall of Babylon Imgur-Enlil a melīt šamāmī 'Inclinc of Heaven' and simmelat ganzer 'Stairway of the Underworld' (F. Al-Rawi, Iraq 47 4:15).

Although it is never explicity stated how the Sun, Moon, stars, and planets reach the gates of heaven in other texts, it is logical to assume that the astronomical paths continued below the horizon. This may be confirmed by AO 6478, where a full circuit of the Path of Enlil includes travel below the horizon.

³⁴ Note also the *namzaqu* 'key' of Anu in UVB 15 36:12. For additional examples of the gates of heaven and parts of the gates, see n. 33 above; Sjøberg Moongod 167:20; E. Ebeling, OrNS 17 420:7, 16; BA 5 572 no. 6:16–17; BiOr 28 10 Aššur IV 23; LKA 32:18, 139 rev. 20/l/140:5; STT 144 9'-10'; ZA 67 10:34; EWO 313; ACh Sin I:8; Craig ABRT 1 22 ii 15; Cohen Eršemma 122:13–16, 125:14–17, 132:21; SpTU III 75:21; SAA 8 459:11–12.

Names for Earth

Numerous Sumerian and Akkadian names for earth and the regions of earth (the earth's surface, Apsu, and underworld) are known. Most names for earth are also names for the earth's surface and the underworld. For instance, erşetu, the most common Akkadian name for earth, is also the common Akkadian name for the underworld, and the three earths of KAR 307 30–38 (earth's surface, Apsu, and underworld) are identified as erşetu elitu, erşetu qablitu, and erşetu šaplitu 'upper, middle, and lower earths'. Nonetheless, with the exception of the term erşetu qablitu 'middle earth' in KAR 307 35, no name for earth is also used as a name for Apsu. Names of the Apsu are examined on pp. 306–17, while names for earth, the earth's surface, and the underworld are examined below. Additional geographic terms and names for the sea are examined on pp. 295–306.

Names for 'Earth', the Earth's Surface, and the Underworld

Lexical Evidence

Most common names for earth, the earth's surface, and the underworld, as well as a number of rare or poetic names, are found in lexical lists. The lists include at least 17 Sumerian names and 16 Akkadian names:

Sumerian Names	Akkadian Names	
a.rá	ammatu	
arali	arali/arallû	
bùr	bīt ^d dumuzi 'House of Dumuzi'	
ganzer	danninu	
idim	erșetu	
· ki	erset la târi 'Earth of No Return'	

¹ For previous studies of names for earth and underworld, see Sladek ID 58-61, with further bibliography; Jensen Kosmologie 160-260; J. Boltéro, Mesopotamia, 273-75.

```
kir.
                                 ganzer/kanisurra
kiši
                                 haštu 'The Pit'
kukku 'Darkness'
                                 irkalla
kur
                                 kiūru
kur.gi
                                 kiūru
kunugi/kurnugia 'Earth
                                 kukkû 'Darkness'
 of No Return'
                                 kurnugû 'Earth of No Return'
lam/lamma
                                 lammu
lamhu
                                 mātu šaplītu 'Lower Land'
uraš<sup>2</sup>
                                 qaqqaru
urugal/erigal 'Grave/Great City'
ZÉ
```

The longest lists of names are found in Group Vocabulary CT 51 168, and parallel sections of *Diri* and *Proto-Diri*. Group Vocabulary CT 51 168 iv 62–70 lists nine equivalents of Akkadian *ersetu*:

```
62. kur
               = er-se-tu
63. lam
               = MIN
64. zé
               = MIN
65. a.rá
               = MIN
66. aralikurbad = Min
67. iglkur
              = MIN
68. kur.gi
               = MIN
69. kur.nu.gi
               = MIN
70. ga.an.z\acute{e}.er = MIN
```

Parallel sections of *Diri* and *Proto-Diri* explain the *diri*-compounds IGI.KUR and IGI.KUR.ZA (see CAD E 308 *erşetu*):

146. 147. 148. 149.	hi.lib ga.an.zèr	IGLKUR IGLKUR.ZA	pa-an er-şe-ti er-şe-tu ir-kal-la dan-ni-na ga-an-zé-er bāb(ká) ^d er-şe-ti ^d er-şe-tu ^d ir-kal-la ^d dan-ni-na ga-an-zèr Diri II 145-54
	ḫa.li.ib	IGI.KUR	ir-ka-al-la pa-ni er-șe-tim

² Sumerian uraš is a name for both heaven and earth (see MSL 14 194; Ea I 338b-c: uraš = šumû, erṣelum). Cf. F. Wiggerman, Natural Phenomena 282, 291. For uraš as a name for heaven, see p. 231.

```
[ga.an.zé.er IGLKUR.ZA] da-ni-na
ka-ni-sur-ra
ku-uk-[ku-u]
ba-ab er-şe-tim
```

Proto-Diri III a, aa-e

Both hilib/halib and ganzer are names for the entrance to the underworld, as well as the underworld as a whole. The entry pāni erṣetim 'front of the underworld' is a literal translation of the diri-compound ICLKUR, since IGI is equivalent to pānu and kur is equivalent to erṣetu, while ganzer = bāb erṣeti indicates that ganzer is a name for a gate to the underworld. In GHT 167, a gate to the underworld is called ká.gal ganzer 'ganzer-gate', and Inanna enters the underworld at é.gal ganzer 'The Palace ganzer' in Inanna's Descent (see Sladek ID 59-60). The significance of the divine determinatives before the names in Diri II 150-53 is uncertain.

The next longest fully preserved list is found in the lexical tablet LTBA 2 2 i 2-5:

```
da-ne-ne = er-şe-tum

ki-u-ru = min

i|r-kal-lum = min

i|lam-mu = min
```

Other lists with three or more names are found in Aa, Igituh, Nabnitu, Group Vocabularies, and Proto-Izi:³

```
Aa\ VI/4\ 29-33\ (MSI.\ 14\ 441)
[a.ra.li] = URU\times X] = er\cdot se-tum
a\cdot ra\cdot li
bit\ ^ddumu\cdot zi
[\acute{u}.ru.gal = URU\times X] = er\cdot se-tum
u\acute{a}\cdot ab\cdot rum
```

Igituh (Short Version b) 157-59 (B. Landsberger, AfO 18 82-83)

```
kur.nu.gi,_{a} = ŠU

É.KUR^{a rali}BAD = a \cdot r[a \cdot al \cdot lu \cdot u]

IGLKUR^{gaan \, rer}ZA = e r \cdot [se \cdot lum]
```

Nabnitu XXV 72-74 (MSL 16 226)

```
^{\lceil}a^{\rceil}.ra.li = a-ra-al-l[u-u] 
É.KUR<sup>MIN</sup>.BAD = MIN 
^{\text{drugal}}urugal = MIN
```

 $^{^3}$ For single entries and lists with two entries, see Aa IV 3 107 (MSL 14 381); Ea II 121–22 (MSL 14 252); Ea IV 162–62a (MSL 14 361); Fa VI C 12'–13' (MSL 14 432); Ea II Aššur MA Excerpt 5 (MSL 14 261); Diri III 205 (see CAD E 308); Diri IV 236–37; Lanu C iii 2 (see CAD K 564); Proto-Izi I Bilingual D i 21'–22' (MSL 13 37); SV1 216 (see MSL 4 206); Group Vocabulary K 4177+ i 14–15 (see CAD I 177); Emar 537:282, 300; 568:52'.

```
Group Vocabulary CT 18 30 rev. i 28-30
           arali(ÉKURBAD) = er-se-tu
           arali
                               = hit mu-ti
           arali
                               = na-aa-ba-ru
Unilingual Proto-Izi I 386-89 (MSL 13 30)
           urugalqa-ab-rum
           urugaler-se-tum
           a.ra.li
           kur.nu.gi₄
Antagal D 122-24 (MSL 17 205)
           [x x] KA \times KI = er-se-tum

[ICLKU]R.ZA = ir-kal-l[um]
           [\acute{E}.KUR].BAD = naa-[ba-rum]
Many of the Sumerian names also occur in PBS I/2 112 in a list of zi.pà (exor-
cism) formulas:4
     61. zi dnerigal den.líl uru.gal.la.ke4 [hé]
     62. zi <sup>d</sup>ereš.ki.gal nin šà ki.gal.la.k[e, hé]
     63. zi dnin.giš.zi.da gu.za.lá kur.ra.ke. [hé]
     64. zi dnam.tar na.gal.mah kur.nu.gi.gi.da.k[e4 hé]
     65. zi dhuš bi ša agrig kur ra ke, hé
     66. zi dšár.šár.bi.id gìri.lá kur.ra? ke, hé
     67. zi de.ta.na sukkal arali, (É.KUR.BAD) li?.ke. hé
     68. zi dbil?.ga?.meš? x x kur.ra? hé
     69. zi <sup>d</sup>x.x.x.x <sup>lú</sup>si.gar ganzer.[ke, hé]
                                              PBS 1/2 112 61-69 (collated)
     61. Be exorcised by Nergal, the Enlil of the underworld.
     62. Be exorcised by Ereškigal, who is queen in the underworld.
     63. Be exercised by Ningiszida, the 'chair-bearer' of the underworld.
     64. Be exorcised by Namtar, the chief nagallu of the underworld.
     65. Be exorcised by Hušbiša, the steward of the underworld.
     66. Be exercised by Šaršarbid, the butcher of the underworld.<sup>5</sup>
     67. Be exercised by Etana, the vizier of the underworld.
     68. Be exercised by Gilgamesh', the .. of the underworld.
     69. Be exorcised by ..., the door-man of the underworld.
```

 $^{^4}$ A parallel bilingual list of zi.pà-formulas is found in K. 3179+ (see E. Ebeling, ArOr 21 387:50–388:80a). Note also OECT V 19:30, 33–34, K. Deller, NABU 1991 pp. 14–16 no. 18.

⁵ Compare the tree šaršabiṭṭu (= Sumerian ½³NE.DU.KU). ĠNE.DU is of course the gatekeeper of the underworld (see J. Bauer, Altorientalistische Notizen 1992 no. 45).

ki, kur, ersetu

The most common names for earth are Sumerian ki and kur and Akkadian ersetu. The name ersetu is the most common Akkadian name for earth, the earth's surface, and the underworld, but Sumerian kur and ki only have some of these meanings. Sumerian ki is the most common name for earth and the earth's surface but is almost never used as a name for the underworld. In contrast, kur, the most common name for the underworld in Sumerian texts, is never used as a name for the carth's surface, although Sumerian kur.kur the lands' is a common name for this region.

The three names also occur in compound names with ki, kur, or *erşetu* as the first element. Examples include the underworld name 'Earth of No Return' (kur.nu.gi = *erset la târi*), and ki, gal = *kigallu* 'Great Earth'.

ki. Sumerian ki occurs countless times in the cosmic pair an.ki 'heaven and carth' and in parallelisms between heaven and carth in texts such as *Gilgameš and the Huluppu-Tree, Enki and Ninmah*, and KAR 4, where an and ki are separated from one another in early times (see pp. 134-42). As such, ki also occurs as a name for the exposed upper surface of earth, the earth's surface.

Two examples of ki = ersetu as the underworld occur in bilingual texts. In SBH 139 no. iv 157-58, 600 Anunnaki are placed in ki = ersetu (see p. 18). These 600 can be identified as the 600 Anunnaki of the underworld in KAR 307 37. In Utukku Lemnutu XVI, demons are sent down to ki = ersetu from the earth's surface.

udug.hul a.lá.hul ki.šč ha.ba.e₁₁.dè ú-tuk-ku lem-nu a-lu-ú lem-nu ana erşetim^{tim} li-ri-du CT 16 22: 280–281 + duplicates (cf. O. Gurney, AAA 22 86: 136–137)

Let the cvil *utukku*-demon and evil *alû*-demon go down to the underworld.

kur. The ordinary name for the underworld in Sumerian texts is kur. In addition to the meaning 'underworld', kur is also equivalent to Akkadian šadû 'mountain' and mātu 'land'. The sign KUR was originally a pictograph of a mountain, so the use of kur as a name for the underworld may indicate that the underworld was once conceived to be a mountain, thought to lie in the mountains outside the Mesopotamian plain, or was placed inside a cosmic mountain that the earth's surface rested upon. Unfortunately, the origins of kur as a name for the underworld are not explained in surviving materials.⁷

⁶ Also note M. Geller, AfO 35 17:48.

⁷ It has long been argued that a cosmic mountain or *weltburg* exists in Sumerian cosmology on the basis of Lahar and Ašnan 1: hur.sag.an.ki.bi.da mountain of heaven and earth (see TCS 3 51 n. 2).

Numerous examples of kur as a name for the underworld occur in texts concerned with the underworld. For example, the term occurs more than 60 times in *Inanna's Descent*, over 30 times in *Gilgames and the Huluppu-Tree*, and more than 10 times in *The Death of Ur-Nammu*. Two other examples occur in the list of *mes* in *Inanna and Enki*, where Inanna steals *mes*, including kur.e₁₁.dè 'descending to the underworld' and kur.c₁₁.da 'ascending from the underworld' (Inanna und Enki 28:23, 54:19–20). In ID 4-13 Inanna is said to abandon her temples before descending to kur. Later in ID 284–85, the goddess ascends from kur. Additional examples occur in a wide variety of texts, including the zi.pà-formulas in PBS I/2 112 (see p. 271) and a hymn to Nergal:

```
garza.gi<sub>16</sub>.sa <sup>1</sup>nì <sup>1</sup>.da.rí kur.šè <sup>1</sup>šu.du<sub>7</sub>.du<sub>7</sub><sup>1</sup>

<sup>d</sup>nerigal lugal u<sub>4</sub>.šú x x x x

<sup>d</sup>en.líl <sup>d</sup>nin.líl.bi sag.e.eš mu.ni.ri[g<sub>7</sub>]

BL 196:26-28 (collated AOAT 11 15)
```

Enlil and Ninlil gave Nergal, the king who daily..., the (duty of) perfecting the eternal rite and everlasting deed for the underworld, as a gift

ersetu. Akkadian ersetu is the most common Akkadian name for both the carth and underworld and is paired with Sumerian kur underworld and ki 'earth', as well as common Sumerian names for the underworld, including arali, ganzer, kur.nu.gi, and urugal in lexical and bilingual texts. Like Sumerian kur and ki, ersetu has a number of other meanings, including 'land, sterritory, ground, and soil' (see CAD E 308). The term is a cognate of the most common names for earth in other Semitic languages such as Hebrew (אוֹה, 'eres) and Arabic (مُرْف), ard).

Unambiguous examples of ersetu as a name for the underworld occur in a wide variety of texts. In Gilg. XII, the Akkadian parallel to Gilgameš and the Huluppu-Tree, Akkadian ersetu translates Sumerian kur 'underworld' more than 30 times (see Shaffer Sumerian Sources). Other examples of ersetu as the underworld occur in dream omens (Oppenheim Dreams 327:71–328:85); An Underworld Vision of an Akkadian Crown Prince (SAA 3 68-76); epithets of underworld gods such as Nergal, Ereškigal, Namtar, Bidu, and Enmešarra (see CAD E 311 2b); and a funerary text, where offerings are presented to the underworld gods in ersetu:

```
qi-šá-a-ti a-na mal-ki <sup>d</sup>a-nun-na-ki ù ilāni<sup>meš</sup> a-ši-bu-ut erṣetim<sup>tim</sup>
[ú]-qa-a-iš
K. 7856:19–22 (TuL p. 58)
```

I presented offerings to the malku-gods, the Anunnaki, and the

and a prayer to Shamash and Adad. In Shamash Hymn 176-79, the Sun-god

resident gods of the underworld.

Unambiguous examples of *erṣetu* as a name for the earth's surface are more difficult to identify, but three can be found in *The Shamash Hymn*, Δtra-lussts,

shines over the carth (*ersetu*) and vast earth (*ersetu rapaštu*) during the day (BWL 136). In the prayer to Shamash and Adad, Adad brings rain down on the *kippat erseti* 'circle of the earth':

... ^dadad qú-ra-du ina kip-pat erseti^{ti} ú-šá-az-na-an-(nu) nu-ul_!!-šu! BBR II no. 100:16 (CAD Z 43 zanānu A 2)

... heroic Adad who brings down bounty on the "circle of the earth" ...

Here kippat erșeti is the earth's surface, since rain falls from heaven directly onto the surface of the earth.

In a broken passage in *Atra-hasis*, the flood-hero explains that he must build his boat because he can no longer live on the *erṣet* ^d*enlil* 'Earth of Enlil' (Lambert-Millard Atra-hasis 90:48). In the parallel passage in Gilg. XI 41–42, Utnapištim explains that he can no longer remain on *qaqqar* ^d*enlil* 'The Ground of Enlil', and so must descend to the Apsu. The only portion of earth above the Apsu is the earth's surface.

erșetu elītu, qablitu, šaplitu 'Upper, Middle, Lower Earth'. The terms erșetu elītu, qablītu, šaplītu occur in KAR 307 35-38 as names for the three earths. The Upper Earth is the earth's surface where Marduk settles the spirits of mankind; the Middle Earth is the Apsu of Ea; and the Lower Earth is the underworld, where 600 Anunnaki are imprisoned (see pp. 16-19).

The term *ersetu qablītu* 'Middle Earth' also occurs a number of times in the Late Babylonian flood tablet BE 39099 (Lambert-Millard Atra-hasis 116–21) as a name for the earth's surface, rather than the Apsu:

[..] x taq-hi-ma (^da-nu u) ^dadad iş-şur e-le-nu [^dsîn u ^dnerga]l iş-şur erşetu^{şa} qab-li-tu₄ [ši-ga-ru n]a-ah-ba-lu tam-tú [a-na-ku aş|-şur qa-du lah*-me-ía

Lambert-Millard Atra-hasis 118:16-19

[...] . You (Enlil) commanded and (Anu and) Adad guarded above, [Sin and Nerga]l guarded the Middle Earth, [The Bolt, "Nlet of the Sea",

[I (Ea) gu]arded together with my lahmu.

Here, 'Middle Earth' is placed between Anu's region above and a region of Ea below. The earth's surface lies between Anu's heavens and Ea's region, the Apsu, where *lahmu* are often to be found (see p. 308).

ki.gal = kigallu 'Great Earth'

Sumerian ki.gal and Akkadian kigallu have a number of meanings. In addition to underworld, ki.gal can be the base or pedestal of a statue, and the diri-compound KI.GAT. can be read sur, with the meaning berūtu foundation

pit' (see CAD B 213). Akkadian *kigallu* also has the meaning 'base or pedestal of a statue' and 'raised platform for cultic use' (see CAD K 348).⁸

As a name for the underworld, ki.gal occurs in the name of Ereškigal, the Queen of the Underworld, as explained in PBS I/2 112:62: zi dereš.ki.gal nin šà ki.gal.la.k[e, hé] 'Be exorcised by Ereškigal, who is queen in the underworld'. Elsewhere, ki.gal occurs in epithets of underworld deities (see TCS 3 54 n. 16), and Inanna turns her mind toward ki.gal from heaven before descending to the underworld in *Inanna's Descent*: 9

```
an.gal.ta ki.gal.šè ğéštu.ga.ni na.an.gu[b]
dingir an.gal.ta ki.gal.šè ğéštu.ga.ni na.an.[gub]
<sup>d</sup>inanna an.gal.[ta ki.gal.šè] ğéštu.ga.ni na.an.[gub]
Sladek ID 103:1-3
```

She se[t] her mind from great heaven to great earth. The goddess [set] her mind from great heaven to great earth. Inanna [set] her mind from great heaven [to great earth.]

A phonetic variant ki.gul is attested in the epithet of Ningišzida lugal. ki.gu.la 'Lord of the Underworld' in TCL 15 25 rev. 10' and in an incantation to Utu (B. Alster, ASJ 13 46:55). This name can be compared with the term tuš.gu.la 'great abode' that occurs as a variant of tuš.kur.ra 'abode of the underworld' in GHT 164 (Shaffer Sumerian Sources 69).

Akkadian *kigallu* is used as a name for the earth as a whole as well as the underworld. In literary contexts, *kigallu* occurs in parallelisms with the poetic names of heaven *ašru* (W. G. Lambert, JAOS 88 131 rev. 6; OIP 40 103 no. 1:13) and *ermi* ^d*anim* (OIP 2 149 v 4; Borger Esarh. 75:3). In the surviving Akkadian portion of a bilingual work, *kigallu* is paired with *tâmātu* 'seas' (W. G. Lambert, ICS 21 129:28).

Elsewhere, kigallu is clearly a name for the underworld. In Late Babylonian royal inscriptions, foundations are placed on kigallu or irat kigalli 'surface of the underworld' (see CAD K 349 3). The underworld god Enmešarra is called ṣābit kippat kigalli 'Holder of the Circle of the Underworld' in R. Borger, ZA 61 77:48, and kigallu may be explained as the region of the dead in a Late Babylonian fragment:

```
...] \lceil ki \rceil-gal il\bar{a}ni^{\mathrm{mes}} i-N[E . . . . .] ki-gal-la : ersetim^{\mathrm{tim}} s\bar{a} mi-[tu\bar{r}-ti\bar{r} . . . . . . . . . SpTU I 164:3′-4′ . . . .] the . . . of the gods he . [ . . . . . . . . .] ki-gallu (means) "earth of the d[ead"? . . .
```

⁸ For ki.gal in an Old Akkadian inscription with a possible meaning 'burial mound', see A. Westenholz, AfO 23 27-31.

 $^{^9}$ Compare CT 16 10 iv 25–30 // SpTU III 64 iv 17–26 (Utukku Lemnutu 10; see p. 280).

There are no surviving examples of the equation ki.gal = kigallu, but ki.gal corresponds to erṣetu in poetic names for the date-palm. Urra III 276 lists eisibila.ki.gal 'Heir of the Underworld' (MSLV 116) as an equivalent of gišimmaru 'date-palm'. Both Malku II 129 (ZA 43 239+dupl.) and Explicit Malku III (CT 18 2 i 57+dupl.) equate gišimmaru with apil erṣetim 'Heir of the Underworld'. Thus ki.gal in ibila.ki.gal corresponds to erṣetim in apil erṣetim.

ki.ùr.ra, kiūru

The Akkadian synonym list LTBA 2 2 i 2-5 lists Akkadian kiūru, danninu, lammu, and irkallu as synonyms of ersetu. A near Sumerian homonym ki.ùr.ra is explained as nēreb ersetim 'entrance of the underworld' in Antagal G 22 (MSL 17 221), and this same name also occurs in Akkadian in a šu.íla to Nabu paralleling the name for the sky burūmū:

ga-mir šip-ţi u purussê(eš.har) bu-ru-me ki-ùr-ra šá ^aa-num ^den-líl ^dé-a še-mu-u zi-kir-šú

W. Mayer, Or 59 461:9-10

(Nabu) who controls the incantation and decision of sky and earth, whose command Anu, Enlil, and Ea obey.

Thus, kiūru may be a loanword from Sumerian. The other possibility is that both the Sumerian and Akkadian names are derived from Urartian qewra, since this word corresponds to erṣetu and qaqqaru in Urartian-Akkadian bilingual texts (see CAD K 476 kiūru B; AfO Beiheft 8/1 44 no. 23). Any relationship between the cosmic place name and the homonym meaning "metal cauldron" (see CAD K 476) is unclear.

ki.^dereš.ki.gal = <u>ašar</u> ^d<u>ereškigal</u> 'The Place of Ereškigal' See p. 289.

Sumerian kur.nu.gi₄/gi, kur.nu.gi₄/gi.a, kur.nu.gi₄.gi₄/gi.gi Akkadian kurnugû, erşet la târi 'Earth of No Return'

The compound name of the underworld 'Earth of No Return' is well attested in lexical lists and Akkadian texts but rare in Sumerian and bilingual works. The significance of the name is that human beings and most gods who descended to the underworld were never able to return to their former homes, as explained in ID 83–84:

a.na.àm ba.du.un kur.nu.gi₄.šè ha.ra.an lú.du.bé nu.gi₄.gi₄.dè šà.zu a.gim túm.mu.un Sladek ID 113 83–84

Why have you (Inanna) come to the Earth of No Return? What brought you to take the road whose traveler never returns?

In Akkadian times, the name was construed as the underworld name kur = erṣetu plus a negative infinitive. In the Sumerian forms kur.nu.gi₄.gi₄ and kur.nu.gi_{.6}.gi_{.4}.de in ID 84.

Sumerian and Bilingual Examples. Both short Sumerian writings kur.nu.gi and kur.nu.gi4, as well as long writings kur.nu.gi4/gi.a and kur.nu.gi4.gi4/gi.gi are known. Proto-lzi and Proto-lzi Bilingual preserve kur.nu.gi, (MSI. 13 30:389; 37:22'), while Group Vocabulary CT 51 168 iv 69 preserves kur.nu.gi. The long writing kur.nu.gi4 a occurs in an excerpt from Lú = ša (MSL 12 106:65) and Lanu C iii 2' (see CAD K 564). The writing kur.nu.gi.gi occurs in PBS I/2 112 64 and kur.nu.gi4.gi4 occurs in a bilingual Sagigameš incantation:

```
<sup>d</sup>nam.tar udug.gal urugal.la kur.<sup>r</sup>nu<sup>1</sup>.gi<sub>4</sub>.gi<sub>4</sub>.ke<sub>4</sub>

<sup>d</sup>MIN ú-tuk-ku rabû<sup>u</sup> šá qab-ri e[r-ş]e-ti la ta-ri

STT 173:1–2 + duplicates (J. Prosccky, ArOr 47 50)
```

Namtar, great *utukku*-demon of the grave (and) 'Earth of No Return' Another writing, kur.nu.gi.da, occurs in an oath formula in LKA 77:

```
zi <sup>d</sup>en.uru.ul.la : niš <sup>d</sup>en.uru.ul.la

<sup>d</sup>nin.uru.ul.la : <sup>d</sup>nin.uru.ul.la

[kur].nu.gi.da.ke, þé.pà : šá kur-nu-gi

I.KA 77 i 5-7 (E. Ebcling, ArOr 21 361)
```

Be exorcised by Enurulla and Ninurulla of 'The Earth of No Return'.

In the oath, kur.nu.gi.da is in the genitive case, so da following the base gi must represent the ending ede plus the a of the genitive ak.

Other Sumerian examples of the term occur in ID 83 (see p. 276) and an Enuru incantation found on an amulet:

```
l<sup>li</sup>kin.gi<sub>4</sub>.a
dumu.nam.tar.me.[cš]
ká.gal kur.nu.g[i.(a)]
im.ta.è.me.e|š|
```

RA 64 68:5-8

The messenger, the son of the fates, came forth from the gate of "The Earth of No Re[turn".]

Akkadian Examples. Akkadian scribes rendered 'Earth of No Return' both by a loanword kurnugû and an Akkadian translation erşet la târi. In lexical lists, the loanword occurs in Lanu C iii 2' (see CAD K 564), Igituh (short version) (AfO 18 82:157), and Ea II 122 (MSL 14 252), while kur.nu.gi4.a and kur.nu.gi are translated as erşet la târi in Lú (MSL 12 106:65) and Proto-Izi Bilingual (MSI 13 37 22').

Outside lexical lists, the term is almost always written KUR.NUGI4.A, but it is not clear if this writing represents the Akkadian translation *erşet la târi*, the

loanword kurnugû, or a loanword 'kurnugia'. Both Igituh (Short Version b 157), where kur.nu.gi₄.a is translated as šu 'itself', and the opening line of The Descent of Ištar indicate that KUR.NU.GI₄.A was not always meant to be translated:

a-na KUR.NU.GI₄.A qaq-qa-ri l[a ta-ri]

CT 15 45:1

An Akkadian rendering of the line ana erşet la târi qaqqari la târi seems awkward, so KUR.NU.GI₄.A here almost certainly represents one of the loanwords. If so, qaqqari la târi in the second half of the line was probably meant to explain the Sumerian loanword, just as lullû-amēlu 'human being' in Gilg. I iv 6 and Ee VI 7 consists of lullû, a loanword from lú.ùlulu, plus the Akkadian equivalent amēlu. ¹⁰ In a medical incantation KUR.NU.GI₄.A is contrasted with erṣetus. ¹¹

erșetu(ki) u KUR.NU.GI₄.A șa-lam-šú ištu KUR.NU.G[1₄.A . . .

AMT 32/1:1

'Earth' and underworld, his image from the underw[orld . . .

kur.gi. Sumerian kur.gi = *erṣetum* occurs immediately before kur.nu. gi 'Earth of No Return' in Group Vocabulary CT 51 168 iv 68–69 and should be the opposite of this underworld name. It is possible, though, that kur.gi is a phonetic writing for kur.gi₆ 'dark earth', since numerous passages explain that the underworld is a dark region (see pp. 352–53). Another possibility is that kur.gi is a scribal error for kur.nu.gi, which was taken up in the scribal tradition.

Vast Earth ersetu rapaštu, ki.dagal, kur.dagal. The term ersetu rapaštu is a common Akkadian name for the underworld but also occurs a few times as a name for the earth's surface. Sumerian equivalents of the term, ki.dagal, ki.nì.dagal, and kur.dagal, occur in bilingual texts.

Examples of *erşetu rapaštu* as a name for the underworld include passages in *Nergal and Ereškigal*, incantations, and royal inscriptions. In the Amarna version of *Nergal and Ereškigal*, Ereškigal offers Nergal kingship in the Vast Earth as a wedding gift:

at-ta lu mu-ti-ma a-na-ku lu áš-ša-at-ka lu-še-eṣ-bi-it-ka šar-ru-ta i-na er-ṣe-e-ti ra-pa-aš-ti lu-uš-ku-un ṭú-up-pa ša né-mé-e-qi a-na qá-ti-ka at-ta lu bé-e-lu K. Bezold, Tell el-Amarna Tablets 82 rev. 34–36 (EA 357:82–84)

10 For a similar phenomenom with the name of Ursa-Minor, mulmar.gid.da.an .na = eriqqi šamê/šamāmī, see W. Horowitz, ZA 79 244. Note also W. G. Lambert, Kraus AV 198:55: dnin-an-na = šar-ra-tu₄ šá-ma-a-me.

¹¹ Other examples of KURNUCI₄.A include BWL 130:80 (Shamash Hymn); W. G. Lambert, AfO 19 117:23; KAR 76 rev. 14, 227 ii 3; Oppenheim Dreams 311:5; STT 73 35-36; Descent of Ištar 12, 93-94; Erra I 185; STT 28 iv 19' (Nergal and Ereškigal, cf. SpTU I 1 iii 3': KURNUCI[...). For KURNUCI[GL₄ = the loanword kurnugû, see Descent of Ištar 41, 86, BWL 70:10 (The Babylonian Theodicy, see pl. 19), Farber Ištar und Dumuzi 242 65'; R. Borget, ZA 61 77:43.

You will be my husband, I will be your wife.

I will have you receive kingship in the Vast Earth.

I will place the tablet of wisdom in your hand. You will rule.

In the late Uruk version of the text, Ereškigal instructs her vizier Namtar to sit on her underworld throne in the Vast Earth prior to a planned visit to the Heaven of Anu:

e-li-ma ti-šab ina giškussî parakki(bára) šarru-ú-tú di-ni er-șe-tu₄ ra-pa-áš-tu₄ i-pu-uš at-ta

SpTU I 1 iii 7'-8'

Go up and sit on the throne of the dais of kingship. You render the judgements of the Vast Earth.

Elsewhere, the underworld gatekeeper bears the epithet *idugal erşetu rapaštu* 'chief gatekeeper of the Vast Earth' (Farber Ištar und Dumuzi 174 n. 146), and an incantation to Shamash speaks of the vast earth in conjunction with the gates of the underworld:

te-pe-el-li abul(ká.gal) erşeti^{ti} rapašti^{ti} lu-nam-mar nu-ra ana ^da-nun-na-ki tu-gam^l-mar[!] di-nam KAR 32:30-31

You open the gate of the vast earth. You make light shine for the Anunnaki, you settle the court case.

In Late Babylonian inscriptions, foundations are placed at *irat erșeti rapašti* 'surface of the vast carth', just as they are placed at *irat erșeti* and *irat kigalli* 'surface of the underworld' in similar contexts (see CAD I 186–87 *irtu* 1 c).

In other passages, 'vast carth' refers to the earth's surface. In Ee VII 68-69, Marduk as Enbilulu-Hegal is said to rain down abundance on the 'vast earth', and dew settles on the vast earth in LKA 70 ii 25:

- ... kīma na-al-ši er-ṣe-tim ˈra-pa¹-[áš-tim li-iz-nun]
- ... like dew of the va[st] earth [may you rain down].

Shamash Hymn 176-79 list duties of the Sun-god over the earth's surface, including those concerned with the 'vast earth', and humans on the 'vast earth' gaze at the sun in a bilingual parallel:¹²

ki.nì.dagal.la zu.šè igi.ne.ne i.nam.ma šá er-șe-tìm rapaštim^{um} di-gi-il-ši-na at-ta-ma NLNI igi nam.mi.in.di húl.la un.dagal.la.cš.àm i-na-at-ta-la-ka-ma i-had-da-a nišū ^{meš} rap-šá-a-ti

4R 19 no. 2 53-56

On the vast earth, their gaze looks toward you. The widespread people look at you and rejoice.

¹² For the sea described as a ki.nì.dagal.la and *erșetu rupaštu*, see Sjøberg Moongod 45:37 and 52 n. 37. Note also EWO 306 (see p. 341).

In Utukku Lemnutu IV, ki.dagal = erṣetu rapaštu is reached by way of the "Gate of Sunset" and is associated with Nergal:

```
ÉN en.e an.gal.ta ki.dagal.la.šè géštu.ga.a.ni nam.[gub]
be-lu iš-tu šamê e rabûti<sup>meš</sup> a-n[a] erşeti <sup>n</sup> ra-pa-áš-ti ú-zu-u[n-šu
iš-kun]
```

en.gal den.ki.ke, an.gal.ta ki.dagal.šè géštu.g[a.ni nam.gub]
be-lu ra-bu-ú dé-a iš-t[u] [šamê^{e]} [rabûti mes] a-na erşeli ^{ti}
ra-pa-áš-ti | ú | |zu-un-šu iš-kun]

dingir.gal an.gal.ta ki.dagal.la.šè géš[tu.ga.ni nam.gub] ilu rabû^a iš-tu šamê^e rabûti^{meš} ana erşeti[^a rapašti^a ú-zu-un-šu iš-kun]

ká.gal dutu.šú.a.šè géšt[u.ga.ni nam.gub a-na a-bul-lu₄ e-reb dšamši ši [ú-zu-un-šu iš-kun] x da.rí dnerigal x [

[] x x [

SpTU III 64 iv 17-26//CT 16 10 iv 25-30

The lord set his mind from the great heavens to the vast carth.

The lord Enki/Ea [set his mind] from the [great] heavens to the vast earth.

The great god [set his min]d from the great heavens to the vast earth.

[He set his min]d toward the 'Gate of Sunset'. eternal Nergal. [...

This passage parallels ID 1-3, where Inanna turns her mind from an gal 'the great heavens' toward the underworld (ki.gal) before traveling to the underworld gates (see p. 275). Enki/Ea's departure toward the underworld here in Utukku Lemnutu can be compared with GHT 14-16, where Enki sails to the underworld kur.

In another bilingual passage, 'The Vast Farth' (kur.dagal = erṣetu rapaštu) is the underworld abode of an asakkku-demon (CT 17 3:22).

'Great Earth' kur.gal = <u>erşetu rabītu</u>

The Akkadian term *erṣetu rabītu* occurs as a name for the underworld twice in the Sultantepe version of *Nergal and Ereškigal* (STT 28 v 10', vi 6; see AnSt 10 122, 124), and twice in Λn Address of Marduk to the Demons (W. G. Lambert, AfO 19 117:26, 32; see pp. 356–57). In the second text, a new arrival to the underworld must pass the gate and stream of the Great Earth. Another example of the gates of *erṣetu rabītu* may be found in the apodosis of an astronomical omen:

...] x e KUR.GAL har-gal-lu-šá it-tab-ba-ku

ACh Adad 19:3618

...].. the locks of the great earth will be overturned.

¹³ ACh Adad 17:34 preserves a similar apodosis: dadad šá KUR: šá A.AB.BA har-gal-li-šá 11E.HF.

The feminine pronoun *ša* indicates that KURGAL should be grammatically feminine, like *erṣetu rabītu*, rather than masculine as in *šadû rabû* 'great mountain'. A parallel, where the doors of the underworld hold their locks in place, is found in Bit Meseri II:

```
^{\rm d}bí-du_{\rm 8}atû rabû šá erşetim ^{\rm tim} pa-nu-uš-šú li-iz-ziz ù ^{\rm gs}daltu hur-gul-li-šú li-iṣ-bat
```

G. Meier, AfO 14 146:127-28

Let Bidu, the chief door-keeper of the underworld, stand before him, and let the door hold its locks fast

Sumerian examples of kur.gal as a name for the underworld include the epithet of Nergal en.kur.gal (A. Sjøberg, ZA 63 4:39, RIM 4 345 no. 11:1); an Ur III literary text where Nergal "fills" kur.gal (see A. Sjøberg, ZA 63 10 no. 39), and a Šurpu-incantation where Girra provides a light in kur.gal:

```
ÉN <sup>d</sup>girra še.er.gal kur.gal.ta [il].la
kir<sub>5</sub> kúkku.ga zalag nu.[x.x]
úg.an.na.ke<sub>4</sub> an.na <sup>l</sup>è <sup>l</sup>(UD.[DU).an.na]
si.kù.ga.a.ni hu.mu.r[a.an.sum]
Šurpu 48 107-10 (BBR pl. 73 102-5) cf. Šurpu 53 6-13
```

Incantation: Girra, Great Light, [exalt]ed throughout the Great Earth. In the Netherworld and "Darkness" where light does not [...] [when] the light of heaven (the Sun) in the sky ri[ses,] let hi[m give] his pure ray, to you.

'Earth of the Dead' kur.ug₅.na = erșeti mītūti

The term Earth of the Dead occurs in an obscure passage in a Dumuzi text as the destination of Dumuzi: 14

```
in.di in.di gaba kur.ra.[šè]

il-lak i-lik a-na i-rat er-ṣe-tim

[u<sub>4</sub>].zal.e u<sub>4</sub>.zal.e kur.ug<sub>5</sub>.na.šè

uš-ta-bar-ri: <sup>d</sup>šamaš ir-ta-bi-šú ana er-ṣe-tim mi-tu-ti

4R 30 no. 2 22-25
```

He goes, he went to the surface of the underworld.

All day long, all day long, to the 'Earth of the Dead'.

(Akk: It remained present: the Sun set for him toward the 'Earth of the Dead'.)

 $^{^{14}}$ For this text and passage, see Jacobsen Treasures of Darkness 66, 247 n. 47; Unity and Diversity 86 n. 22. Sumerian kur.ùn.na can also mean $\check{s}ad\hat{u}$ el \hat{u} 'high mountain' and $\check{s}ad\hat{u}$ el \hat{u} 'high mountains', as is probably to be restored in Nabnitu 25:148–49 (MSL 16 227). Compare also SpTU I 164:3'–4' (see p. 275).

'Distant Earth' kur.sù.da/ersetu rūqtu

The Akkadian portion of a later passage in $4R^2$ 30 no. 2 preserves another compound name for the underworld, 'Distant Earth':

mes ki.a.na.sù nu.mu.un.da.pà.da¹⁵
eṭ-lu ana erṣetim^{tim} ru-uq-ti šá la in-nam-ma-ru
4R 80 no. 2 34-35

(Dumuzi) the vouth to the distant earth, which is never seen

A parallel to Akkadian erşetu $r\bar{u}qtu$ may be found in the first line of a hymn to Ningiszida:

[ur].sag en šà.túm a.gàra ^fur¹.maḫ kur.s[ù.da] TCL 15 25:1

[He]ro, Lord of Meadow and Field, Lion of the Dista[nt] Earth.

ammatu (ambatu/abbatu)

The term ammatu, a poetic name for earth, occurs in Enuma Elish, The Babylonian Theodicy, and Malku. In Ee I 1-2, šamāmū and ammatu 'heaven and earth' do not exist at the very start of creation. The Theodicy preserves an adverbial form of the term, ammatiš, which is explained by the commentary as kīma erṣeti 'like earth' (BWL 74:58). In Malku I 51, ammatu (ambatu) is listed as a synonym for the name of earth, dannatu (A. Kilmer, JAOS 83 425). Akkadian ammatu is probably a cognate of Hebrew אדבה (adamā) 'ground'.

arali, *arallû*

The underworld name $arali=arall\hat{u}$ is common in Akkadian and bilingual texts but relatively rare in Sumerian works. Four Sumerian writings of the term are known. Most common are the syllabic writing a.ra.li and the diri-compound £KURBAD, which is glossed a.ra.li in Igituh (Short Version) 158 (AfO 18 82). Less common are the writings KURBAD (arali,), which is glossed a.ra.li in Group Vocabulary CT 51 168 iv 66, and URU×X, which is known from parallel entries in Ea and Aa:

```
a.ra.l[i] = URUx[X] = er-se-tum
Ea IV C' 12' // Aa VI/4 29 (MSL 14 482, 441)
```

¹⁵ Compare RIM 4 284: 3:ki,an.a.na.šú.a.aš/ki.an.na.a.ki.šú.a.aš.

¹⁶ In RA 79 187-88, M. Hutter argues that *ammatu* is a name for the underworld in Ee I 1-2. For Ee I 1-2, see also p. 108.

¹⁷ The writing am-ba-tum is only attested in STT 392:51 (Malku I 51), so this may be a scribal error for am-ma-tum. For the commentary to Theodicy 58, see also CAD A/2 75 ammatu B "lexical section."

In Akkadian texts, both a short writing *arali* and a long writing *arallû* are known. For example, Nabnitu 25 72–73 preserves *a-ra-al-l[u-u]* (MSL 16 226), while Aa VI/4 30 preserves *a-ra-li* (MSL 124 441), probably for *aralu*.

The origins of arali as a name for the underworld are unclear, but it seems probable that the term became a name for the underworld because of close connections between a.ra.li, Dumuzi, and Dumuzi's city Bad-Tibira. A temple named é.a.ra.li belonging to Dumuzi is located in or near Bad-Tibira in TCS 3 30:215, and Dumuzi is captured by gallû-demons in a "ditch of arali" (e.a.ra.li) before being carried away to the underworld in Dumuzi's Dream:

```
e.a.ra.li.ka hé.en.šub ki.ni ba.ra.zu
ddumu.zi.dè e.a.ra.li.ka mu.ni.in.dab<sub>5</sub>.bé.ne
B. Alster. Dumuzi's Dream 70:150-51
```

"He fell into the ditch of arali. I do not know where he is."
They (the gallû-demons) seized Dumuzi in the ditch of arali.

In this passage, c.a.ra.li 'ditch of arali' may be pun on the temple name é.a.ra.li or even allude to a ditch that an underworld stream flows through. In two other Dumuzi texts, a.ra.li is located in steppe-lands that presumably lie outside Bad-Tibira:

```
edin nigin edin nigin šeš.mu edin.nigin
edin a.ra.li edin.nigin šeš.mu edin.nigin
Cohen Ershemma 88:28-29 (CT 15 19)
```

(Geštinanna) roams the steppe, roams the steppe, "my brother" (Dumuzi, she cries) as she roams the steppe.

The steppe, *arali*, she roams the steppe, "my brother" (she cries as) she roams the steppe.

```
a.ra.li KA.edin.na.ke<sub>4</sub> [ . . . á-ra-á-lá-a <sup>he-pé ex-sú</sup>
```

TCL 6 54 rev. 20-21

At arali the ... of the steppe (new break) [...

In any case, arali is already in use as a name for the underworld in the Ur IIIperiod literary work *The Death of Ur-Nammu*:

```
nitalam.a.ni <sup>d</sup>nin.a.zi.[mú.a]
dub.[sar.maḫ a].ra.li.[ra]
```

S. N. Kramer, JCS 21 115:125-26

[To] his wife Ninazi[mua], the [august scr]ibe of the [u]nderworld

¹⁸ In JAOS 103 195 g, T. Jacobsen suggests that a rali was originally the name of the desert between Bad-Tibira and Uruk and that the use of a rali as a name for the underworld is secondary.

A bilingual parallel where Ninanna replaces Ninazimua is found in Utukku-Lemnutu III: dub.sar.mah.arali = tup-šar-ra-tum şir-tum šá a-ra-al-le-e (CT 16 3:95-97). Another Sumerian example of arali as a name for the underworld occurs in a late Enuru amulet:

lú ba.ug₇ ki.nú nu.tuku lú ba.ug₇ sag.èn.tar nu.tuku a.ra.li ki.tuš.a ba.tuš

BA 64 68:2-4

The man who is dead has no bed.

The man who is dead has no attendant.

In *grali* be sits on a seat.

In a bilingual incantation to the Sun-god, dead gods inhabit arali = arallû:

sag.tuku dingir.ug₅.ga.àm šà.ga arali.ke₄ ra-bi-iş dingir-ug₅-ga-e i-na qé-reb a-ra-al-li

A. Falkenstein, UVB 15 36:9

(Sun-god) caretaker of the dead-gods inside the underworld.

In Akkadian texts, *arallû* is both a name for the underworld and a mountain where gold is found. Examples of *arallû* as the underworld include Underworld Vision 28, 30, 53, and 58 (SAA 3 70–74) and an incantation where the name occurs alongside the synonym "Earth of No Return":

a-na KUR.NU.GI4-A li-še-re-es-su-nu-ti a-na eṭemmi(gidim) a-ra-le-e li-ru-šú-nu-li

LKA 154 rev. 12-13

Let it (fire) take them down to the "Earth of No Return", let it direct them to the ghost of the underworld.

In Gilg. IX ii 4-5 and the account of the eighth campaign of Sargon II (TCL 3 6:19), the bases of cosmic mountains Mt. Mašu and Mt. Simirriya reach into arallû below, while the peaks of the mountains reach the heavens above. In Erra I 151-53, the roots of a cosmic mēsu-tree reach down to arallû (see p. 245).

KUR.BAD

In Group Vocabulary CT 51 168 iv 66, the diri-compound KURBAD is glossed a.ra.li, indicating that the two signs can be read arali. Elsewhere,

 19 For $arall\hat{u}$ as a mountain of gold, see Urra 22:22 (MSL 11 23), Lipšur Litanies (E. Reiner, JNES 15 132:21) and the inscriptions of Esarhaddon and Assurbanipal (Borger Esarh. 88 rev. 14; E. F. Weidner, AfO 13 205:26). The name of the mountain, however, derives from the land of gold harali = <code>harallu</code> known from third millennium and Old Babylonian tablets (see A. Sjøberg, JCS 40 174), so the shared name between the mountain and the underworld is probably coincidental. A second Mt. Arallu is identified with the cella of the god Assur, Ehursagkurkurra, in the city of Assur (Winckler Sargon 70:416–17; 128:156).

however, KURBAD is resumed by m in an exorcism formula, suggesting that KURBAD could also represent a different name: KURBAD $ma: [\check{s}a...]$ (ArOr 21 373:46). One possibility is a reading kur.idim, since idim is equated with ersetu 'underworld' and ekletu, etûtu 'darkness' in Emar 568 52'-54'. Another possibility is a diri-compound KURBAD = dalam on the basis of a lexical tablet related to the series $Malku.^{20}$

KUR.BAD = $\frac{\partial e^{-pe}}{\partial e^{-pe}}$ $\frac{\partial e^{-pe}}{\partial e^{-pe}}$ $\frac{\partial e^{-pe}}{\partial e^{-pe}}$ $\frac{\partial e^{-pe}}{\partial e^{-pe}}$

CT 18 29 ii 26-28

If dalumu does represent a loanword from Sumerian dalam, which is a name for the underworld, then lines 27–28 may have preserved common names for the underworld, such as *ersetu* and *arallû*.

The cosmic place name KURBAD also occurs in the divine name $^{d}en.KUR$. BAD (PBS I/2 106:17).

bùr, bùru, haštu

Sumerian bùr/bùru 'pit, hole' occurs as a poetic name for the underworld. In Aa II/4 110 (MSL 14 283), bùru is equated with *ersetu*. The same name occurs in a hymn to Lugalgirra and Meslamtaca:

en dlugal.gìr.ra gìri.zu um.mi.gub nun.kur.ra.ke4 ša.mu.e.ši.gam.e.dè.eš bùr.ra u4.zalag ša.mu.un.ne.ri.ib.è

A. Sjøberg, Or. Suec. 19-20 142:23'-25'

Lord Lugalgirra, when you set foot there, the prince(s) of the underworld indeed bowed down to you. In "The Pit" you made a shining light go out for them.

In line 25, bùr.ra may be a syllabic spelling for bùru = erṣetu plus locative a. Akkadian haštu 'hole, grave, pit' is explained as erṣetum in the commentary to Theodicy 62 (BWL 74): "For the crime which the lion committed the haštu 'hole' (i.e., ersetum 'underworld') is opened for him."

a.rá

Sumerian a.rá is equated with *ersetu* in Group Vocabulary CT 51 168 iv 65. This is surprising, since none of the usual meanings of a.rá (see MSL 14 206:194–210) explain how a.rá can be a cosmic place name.

²⁰ K. 2054+ (CT 18 29-30) may be an exemplar of an expanded version of Malku = Šarru. The colophon identifies that tablet as the third tablet of the series Šarru (CT 18 30 rev. ii 32), and the opening line preserves the entry [mal]-ku = šarru, followed by 30 more equivalences of šarru. Canonical Malku only lists five equivalences (A. Kilmer, JAOS 83 424:1-5).

dannatu and danninu

Both dannatu and danninu derive from the root danānu 'to be strong'. In KAR 307, the surfaces of each of the three earths, including the underworld, are identified as dannatu (see p. 16). In Malku I 51 (JAOS 83 425), dannatu is listed as a synonym of the name of earth ammatu, while the lexical tablet LTBA 2 2 i 2 and commentaries to Enuma Elish equate danninu with ersetu (see CAD D 91: Fest, Finkelstein 14).

The term *danninu* occurs both as a name for the underworld and for the earth as a whole. In Diri II and Proto-Diri III, *danninu* is equated with the Sumerian underworld names bilib and ganzer (see pp. 269-70), and a hymn to Nergal identifies the 600 Anunnaki of the underworld with *danninu*:

a-ši-ir dan-ni-na sa-ni-iq ni-i-ir lu-uš-tar-ri-iḥ nar-bi-ka Bollenrucher Nergal 50:4

(Nergal) controller of the underworld, organizer of the 600, let me extol your might.

In Ee VII 135-36, the term is paired with the name for heaven ašru:

áš-šú áš-ri ib-na-a ip-ti-qa dan-ni-na dhēl mātāti šum-šu it-ta-bi a-bu den-líl

Ee VII 135-36

Because he created the heavens, fashioned the earth "Lord of the Lands" is the name that father Enlil gave him.

In Assurbanipal's Acrostic Hymn to Marduk and Zarpanitum, danninu occurs with Apsu and lumāšu-stars (SAA 3 8:37).

erigal-Scc urugal

<u>ešgalla</u>

The name ešgalla is a a loanword from Sumerian èš.gal 'great shrine'. In Ee IV 143-46, ešgalla is a second name for the Apsu (see p. 113). However, it is possible that ešgalla was also a name for the underworld, since the signs used to write èš.gal (AB.GAL), when joined AB×GAL, form a writing for the underworld name urugal = erṣetu (Ea IV 162a, Aa IV/3 107; MSL 14 361, 381).

<u>ešmahhu</u>

Akkadian ešmaḥḥu occurs twice as a cosmic place name. In the Marduk hymn STC I 205 19-21 (see pp. 310-11), ešmaḥḥu is the underworld that houses the dead ṣallūtu (literally 'the sleepers'). Here, ešmaḥḥu is a poetic name for the underworld alongside poetic names for the other three regions of the universe: heaven, the earth's surface, and the Apsu (šamāmū, dadmū, asurrakku). The second example of ešmaḥḥu is found in a Sennacherib inscription in the first of

two epithets of "The Tablet of Destinies": [p]irišti šamāmū u ešm|ahhi] '[S]ecret of Heaven and ešm|ahhi]', and [m]arkas ermi anu u ganzer '[B]ond of Anu's Canopy (Heaven) and Underworld' (A. George, Iraq 48 133 B 4–5; see p. 227). Here ešmahhu parallels ganzer.

ganzer, kanisurra

Sumerian ganzer is both a name for the underworld and an entrance to the underworld. In Diri II and Proto-Diri III (see pp. 269-70), ganzer, written ICLKURZA, is both explained as *bāb erṣeti* 'gate of the underworld' and also translated by the underworld names *erṣetu*, *danninu*, *irkalla*, and *kukkû*, as well as by loanwords *ganzer* and *kanisurra*. In Antagal D 123, Sumerian ganzer is equated with Akkadian *irkallû* (MSI. 17 205). The etymology of ganzer is uncertain (see A. George, Iraq 48 136 n. 5).

In addition to the *diri*-compound IGLKURZA, the name is also written IGLKUR in Group Vocabulary K. 4177+ with a gloss [ga].an.zer (see CAD I 177).²¹ In *Diri* and *Proto-Diri*, the diri-compound IGLKUR is treated as a separate name for the underworld, to be read hilib or halib.

The clearest textual examples of ganzer as a name for the underworld are found in GHT 176, 180, and 233, when Gilgames's pukku and $mekk\hat{u}$ fall into ganzer. The corresponding lines of Gilg. XII translate ganzer by the underworld name ersetu (see Shaffer Sumerian Sources 71–72, 83). Earlier in GHT 167, however, ganzer occurs in the name of a gate to the underworld:

ká.gal ganzer IGI.KUR.ra.ka tuš im.ma.ni.in.gar

In this line, IGLKUR is probably to be understood as *pāni erṣeti* 'front of the underworld', as in Diri II 145 and Proto-Diri III aa, with the subsequent translation:

At the ganzer-gate at the front of the underworld they (the pukku and $mekk\hat{u}$) came to a rest.

Nevertheless, a reading ganzer for IGLKUR is possible here, since the signs are resumed by τ . The first part of GHT 167 is repeated verbatim in a variant of ID 126 (see Sladek ID 118 n. 126).

Examples of ganzer in names for the entrance of the underworld include passages in *Inanna's Descent*, where <code>gistig.kur.ra</code> 'door of the underworld' and ká.gal.kur.ra 'gate of the underworld' are located at é.gal.ganzer 'the palace *ganzer*' (see Sladek ID 59-60); Inanna und Enki 60:41, which preserves é.ga. an.zé.er 'the house *ganzer*'; and the divinc epithet ^{los}si.gar ganzer 'door-man of *ganzer*' in PBS I/2 112:69.

The only known Akkadian examples of ganzer outside lexical lists occur in a Schnacherib inscription, where ganzer parallels ermi danim (A. George, Iraq 48 133 B 5), and a Nabopolassar inscription, where simmelat ganzer Stairway

²¹ For writings ga.an.ze/zé.cr, see Group Vocabulary CT 51 168 iv 70; JCS 4 139 rev. ii 7; Inanna und Enki 60:41; UET 6/2 141 ii' 2'.

of the Underworld' parallels *mēlīt šamāmī* Incline of Heaven' (F. Al-Rawi, Iraq 47 4:15). Akkadian *kanisurra* also occurs in the divine name ^dkanisurra (RIM 4 468:1; Ugaritica V 212:23, 248:11; RGTC 8 373).

<u>haštu</u>-See bùr, bùru, <u>hastu</u>, p. 285

hilib. halib

Diri and Proto-Diri preserve parallel sections explaining hilib and halib (IGLKUR), and ganzer (IGLKURZA; see pp. 269–70). No certain examples of the names outside Diri and Proto-Diri are known, since IGLKUR is never resumed by a syllable beginning with b. Possible examples of the term, however, may be found in Group Vocabulary CT 51 168 iv 67, where IGLKUR is translated as ersetu, GHT 167, where IGLKUR occurs with ganzer (see p. 287), and a passage in Utukku Lemuutu XII:²²

ki.tuš.a.na ki.ICLKUR.àm šu-bat-su a-šar er-se-tim-ma

(M. J. Geller, Iraq 42 28:8'-9')

His abode is the place of the underworld.

A related entry may be found in Group Vocabulary K. 4177+:

x.lu.kuIGI.KUR = ^{d}ir -[kal-la]

(see CAD I 177 irkalla)

irkalla

Akkadian *irkalla*, a literary name for the underworld, occurs both with and without determinative dingir and in the compounds *šubat* ^d*irkalla*, *mūšab* ^d*irkalla*, and *bīt irkalla*. The name may be an Akkadian rendering of the Sumerian underworld name urugal/erigal, but no lexical or bilingual equivalence between the Sumerian and Akkadian names is known. In lexical lists, *irkalla* is equated with Sumerian hilib/halib, ganzer, kir₅, and lamhu (see CAD I 177).

Outside lexical lists, *irkalla* occurs in literary works and the late mystical-religious commentary O 175:7 (Livingstone 190). In Descent of Ištar 4, Gilg. VII iv 33, and *Nergal and Ereškigal* (STT 28 ii 7', v 8', vi 47), as well as O 175:7, the term is written with the determinative dingir. Examples without the determinative include Erra I 135 and IV 123; Ludlul II 47 (BWL 40); and LKA 62 rev. 11, 13–14 (the variant edition of *The Descent of Ištar*).

²² Note also ^dIGLKUR in Shaffer Sumerian Sources 70 167 2 r. For a Mari and western month name ^{tu d}IGLKUR.ra and possible connections with *Inanna's Descent* and The Descent of Ishtar, see Langdon Menologies 41; RIA 5 301 Mari month VI; W. G. Lambert, MARI 4 526.

Within the texts listed above, *irkalla* occurs in compound forms four times. In parallel passages from *The Descent of 1štar* and Gilg. VII, the underworld is called "House of Darkness" and *šubat* ^d*irkalla*:

```
a-na bit e-țe-e šu-bat <sup>d</sup>ir-[kal-la] CT 15 45:4
a-na bit ek-le-ti šu-bat <sup>d</sup>ir-kal-la Gilg, VII iv 33
```

To the "House of Darkness" the abode of the underworld.

O 175:7 also preserves this same compound with the writing TUŠ ^d*ir-kal-la*. A variant to Gilg, VII iv 33 preserves *mūšab irkalla* and I.KA 62 rev. 14 preserves *bīt irkalla*.

The use of the determinative before the underworld name may indicate that *irkalla* in the compounds, at least, should be understood as a divine name as well as a place name. In an Old Babylonian god-list, ^d*irkalla* is identified as a name of the goddess Allatum, who is equated with Ereškigal:

```
 \begin{array}{lll} ^{\rm d}ere\S-ki-gal-la &=& [^{\rm d}al]-la-t[um] \\ ^{\rm d}al-la-tum &=& ^{\rm d}a[l-l]a-t[um] \\ ^{\rm d}ir-kal-la &=& ^{\rm d}al-la-t[um] \\ &=& {\rm E.\ Weidner,\ AfK\ 2\ 73:23-25\ (cf.\ Ugaritica\ V\ 218:116-18)} \\ \end{array}
```

On this basis, the parallel lines in *The Descent of Istar* and *Gilgamesh* could be translated 'to the House of Darkness, the abode of (the goddess) Irkalla'. If so, this name may be compared with the underworld name 'Place of Ereškigal' (ki.dereš.ki.gal = ašar dereškigal), which occurs once in Dumuzi and Geštinanna 6 (Sladek ID 226:6) and once in a bilingual incantation in Utukku-Lemnutu VI (O. Gurney, AAA 22 86:130-31).

kir, and kiši, idim

The rare underworld names kir, and kiši occur in Ea II 121-22.

```
ki.ir = IDIM = MIN (i-dtm-mu) = ir-kal\cdot la
ki.ši = IDIM = kur-nu-gi
= IDIM
```

MSL 14 252

The name kir_5 appears once elsewhere as a name for the underworld in Surpu 48 108 (see p. 281). An equation idim = ersetum occurs in Emar 568:52'.

kukku, kukkû, KI.KI

Sumerian kukku 'darkness' occurs as a name for the underworld in Diri IV 236-37:

```
ku.uk.ku = KIK[I] = k[u!-u]k-ku!-\acute{u}! = ma-a-t\acute{u} šap-l[i-t\acute{u}] CT 11 48 rev. iii 4' (CAD K 498)
```

In Proto-Diri IIId, Akkadian $kukk\hat{u}$ is equated with ganzer and synonymous with danninu and kanisurra (see pp. 270–71). Although the name is written KLKI in Diri IV, the term most probably originated from a writing of the word kukku (KU₁₀.KU₁₀ = MIMI) that is equivalent to Akkadian ekletu and etatu 'darkness' (see CAD E 413). Sumerian KLKI, with the reading utu, may also be listed as a name for the underworld in Antagal G 19:

$$KI.^{\text{ú.tu}}KI = ersetim^{\text{tim}} \check{s}[\acute{a}...$$
 MSL 17 221

The term 'House of Darkness' (é.kukku = bīt ekleti) occurs in Šurpu 53 rev. 12-13, a Sumerian incantation (see YOS 11 p. 20e) and parallel descriptions of the underworld in *The Descent of Ištar*, Gilg, VII, and *Nergal and Ēreškigal* (see p. 349).

lam, lamma, lammu

Sumerian lam and lamma, and the loanword lammu, are listed as equivalents of ersetu in lexical lists and commentaries. In LTBA 2 2 i 2-5, lammu is listed as a synonym of ersetu along with danninu, kiūru, and irkalla, while Sumerian lam is equated with ersetu in Group Vocabulary CT 51 168 iv 63, and lamma is equated with ersetu in Sb1 216:

```
la.am.ma = LAM = er-şe-tum

MSI. 3 115:216 corrected by MSL 4 206:216
```

Outside lexical lists, lam is equated with ersetu in explanations of the word melammu in commentaries:²³

```
[ME :] šamê ^{e} : LAM : er-şe-t\acute{u} : a-šib šamê ^{e} erşetim^{tim} W. G. Lambert, AfO 19 118 F 8
```

lamhu

The Sumerian name lamhu occurs in a Middle Assyrian excerpt from *Ea* that lists rare signs and readings:

MSL 14 261:5

<u>mātu šaplītu</u> 'Lower Land'

Diri IV equates $m\bar{a}tu$ šaplītu with the underworld name kukku = $kukk\hat{u}$ darkness' (see p. 289). The term $m\bar{a}tu$ šaplītu usually refers to southern areas downstream from central Mesopotamia, or down the Persian Gulf.

²³ See also Antagal G 317 (MSL 17 229) [giš.lam.šár.šár = muš-tu-b]il AN u KI. Note also the name of Nippur dur.giš.lam (= markas šamê u erşetum; see A. George, RA 85 160).

mītu

An entry in Group Vocabulary 5R 16 equates Akkadian *mītu* 'dead' with the Sumerian underworld name a rali:

```
É.KUR^{\text{ara,li}}BAD = mi\text{-}i\text{-}tum 'Dead'
ki.túm = q\acute{e}-b\acute{e}-ru 'to bury' 5R 16 iv 42-43
```

miriyaš

Kassite *miriyaš* occurs as an equivalent of Akkadian *erşetu* in the Kassite-Akkadian vocabulary T. Pinches, JRAS 1917 103:22 (Balkan Kassit Stud. 4).

naqbaru

Akkadian *naqbaru* 'tomb, burial place' appears as an equivalent of arali in a Group Vocabulary CT 18 30 rev. i 30 and Antagal D 124 (see p. 271). The name *naqbaru* can be compared both with Sumerian urugal/erigal, which has the meaning *qabru* 'grave' as well as 'underworld' (see p. 293), and Akkadian *haštu* 'pit, grave' (see p. 285).

gabru-See urugal = gabru, pp. 293-94

gaggaru

Akkadian qaqqaru, like Sumerian ki, is commonly used as a name for earth and the earth's surface but also occurs as a name for the underworld. The word occurs from the Old Akkadian period onward and is the most common name for earth in Achaemenid royal inscriptions (see CAD Q 123 2'). An Old Assyrian example occurs in an incantation (BIN 4 126:13). Old Babylonian examples occur in three parallel lines in a hymn to 1star (VAS 10 213 i 6', 8', 10') and a broken passage in an Old Babylonian religious text:

```
[......] <sup>r</sup>ú<sup>1</sup>-šu-li-ia-šu ka-qá-ar-šu
(W. G. Lambert, Fest. Reiner 192:43 (cf. 192:32)
[......] he raised him up to earth.
```

In this passage, *quaqqaru* must be the earth's surface, since there is no cosmic region below the underworld or earth (the lower half of the universe as a whole). Other examples where *qaqqaru* refers only to the earth's surface include Gilg. VII iii 44, where the princes of the *qaqqaru* are said to kiss Enkidu's feet; Gilg. XI:41,

²⁴ Parpola (LAS II 117 n. 6, 21) proposes that Neo-Assyrian KlTIM, when paired with šamû, be read as forms of qaqqaru (kaqqaru, qaqqiru, ctc.) rather than ersetim^{tim}. See also K. Deller, Fest von Soden 48 u.

where the earth's surface is identified as quaqar denlil the Earth of Enlil, and a hymn to Gula, where mankind lives on the qaqqaru:

... ina q]aq-qa-ri tu-ma->-ir ab-ra-a-ti ana ilāni ^{meš} rabûti ^{meš} tu-šar-bi zik-|ra-ki|

LKA 17:15

... on the elarth's surface you directed mankind, for the great gods you made [your na]me great.

Two other texts, *The Cruciform Monument of Maništušu* (E. Sollberger, JEOL 20 55:78–80) and an Amarna letter (EA 105:11), contrast *qaqqaru* with names for the sea, so *qaqqaru* can also refer specifically to the dry land portion of the earth's surface.

Examples of qaqqaru as a name for the underworld include the terms qaqqaru la târi 'Earth of No Return' and qaqqiru rabîtu 'Great Earth' in variant versions of The Descent of Ištar (CT 15 45:1; LKA 62 rev. 10, 12) and a passage in fire incantations (W. G. Lambert, AfO 23 43:32). ²⁵ A reference to the underworld river as na-i-il ka-a[q-qa-ri . . . 'Watercourse of the Ea[rth . . ' in W. G. Lambert, Fest. Sjøberg 326 i 64 parallels na-ilu ša erṣeti rabīti 'Watercourse of the Great Earth' in An Address of Marduk to the Demons (W. G. Lambert, AfO 19 117:32). ²⁶

šaplātu 'Lower Regions'

The name šaplâtu, a general term referring to lower parts of the universe, often appears as an opposite of elâtu 'Upper Regions' (see CAD Š/1 464 2). On a few occasions, šaplâtu refers specifically to the underworld. In funerary texts, both šaplâtu and elâtu occur in a common blessing: ²⁷

i-na e-la-ti šum-šu li-id-mi-iq i-na ša-ap-la-ti e-ţe-em-mu-šu me-e za-ku-ti li-il-tu-ú

VAS 1 54:15-19

In the upper regions let his name be praised. In the lower regions let his ghost drink pure water.

In a broken passage in a funerary text, the Anunnaki gods are found in šaplātu:

- ...] šu-bat da-nun-na
- ...]-am i-na ša-ap-la-ti

Kish I pl. 34 2:11-12

²⁵ See also I. Finkel, AfO 29–30 9 ii 2' and an unpublished parallel in CAD Q 124 9. ²⁶ Note the unusual order qaqqarum šamā²um in an Old Babylonian parallel to The Descent of Ištar and an Old Akkadian incantation (see W. G. Lambert, Fest. Moran 293–94 LE). Compare Genesis 2:4.

²⁷ For other examples of the blessing and pairings of šaplâtu with elâtu, see CAD E 77–78 elâtu 2; A. Tsukimoto, AOAT 216 154. For šaplâtu as the underworld, see also

CAD Š/1 464 2.

- ...] the abode of the Anunna-gods.
- ...]. in the lower regions.

urugal, erigal

The Sumerian underworld name urugal/erigal, literally 'Great City', occurs in the name of the king of the underworld Nergal. The Emesal god list explains that the most common writing of the god's name, ^dne.cri₁₁.gal (= ^dnerigal₁), is a contracted form of en.urugal 'Lord of the Great City';²⁵

d
umun. f uruga 1 1 = d n è. eri 1 1. ga 1 2 = $\check{s}u$

Emesal I 106 (MSL 49)

In Emesal I:2, 12-14, 43, and 50 (MSL 4 4-7), names of gods beginning umun in Emesal start with en in the standard dialect.

Hymns to Nergal and epithets of Nergal also use the name urugal. In PBS I/2 112 iii 61, Nergal is called "Enlil of urugal". This epithet is explained in a hymn to Nergal:

dnerigal é⁷.da.rí eri₁₁.gal den.líl.bàn.da.me.en S. Kramer, Fest. Sjøberg 306:67

Nergal, at the eternal house', "The Great City," you are the junior Enlil.

In Death of Ur-Nammu 89 (S. Kramer, JCS 21 114), Nergal is identified as den.li1.kur.ra Enlil of the Underworld'. Sumerian urugal/erigal also occurs in epithets of other underworld gods in Death of Ur-Nammu 109, 133 (JCS 21 114-15) and in RIM 4 284:3.

In lexical lists and bilingual works, urugal is translated by Akkadian names for the underworld. Nabnitu XXV 74 equates urugal with arallû (MSL 16 226), and urugal = ersetu occurs in Proto-Izi 387 (MSL 13 30) and the bilingual menology of Astrolabe B (KAV 218 A iii 3, 8). Broken examples of urugal = ersetu are also found in Ea and Aa (MSL 14 361:162a, 381:107, 441:32). As noted earlier, Akkadian irkalla is probably a loanword from urugal/erigal.

urugal = qabru

As well as a name for the underworld, urugal also has the more common meaning *qabru* 'grave' (see CAD Q 17–18). Both meanings are clearly related, since the destination of all those lowered into graves was the underworld. An example of urugal = *qabru* as the underworld may occur in the opening line of a bilingual *totengeist*-incantation where "captive gods" are found in urugal = *qabru*:

²⁸ For a scrics of studies of erigal/urugal in the name of Nergal, see W. G. Lambert, ZA 80 40-52; P. Steinkeller, ZA 77 161-68; ZA 80 58-59. Note also ^aNE_ERI₁₁.KI. GAL in cylinder seals (D. Collon, Catalogue of the Western Asiatic Seals in the British Museum, Cylinder Seals III (1986) no. 53, 112.

ÉN dingir.dib.dib.bé.e.ne urugal.la.[ta] im.ta.è.a[^{mes}] ilānu^{mes} ka-¹mu-ti¹ iš-tu qab-rim it-ta-ṣu-ni W. Schramm, OrNs 39 405:1-3 (cf. 4-10)

Incantation: The captive gods came forth from the underworld/grave.

The 'captive gods' are placed at the gates of the underworld in Bit Meseri II 126–28 (AfO 14 146) and may be associated with the underworld gate $b\bar{a}b$ $kam\hat{u}ti$ 'Gate of the Captives' (AfO 19 117:25; TuL 128 8').²⁹

zikura

A rare, possibly foreign name for 'earth', zikuru (KASKAL.ÀŠ) is listed in Antagal G 282 (MSL 17 228) as an equivalent of erşetu.

House Names

A number of Akkadian names for the underworld are kennings formed by compounds with *bītu* 'house'. These include 'House of Darkness' (*bīt eṭī*, *bīt ekleti*), 'House of Death' (*bīt mūti*), 'House of Dumuzi' (*bīt dumuzi*), and 'House of Dust' (*bīt epri*). A related equation é.ki.kur = *erṣetu* is found in K. 2873:1–2 (CT 17 41).³⁰

Related Terms

Ekur/bit ekur. AHw 196 identifies the name of Enlil's temple at Nippur, Ekur, as a name for the underworld on the basis of passages in Ludlul Bel Nemeqi and bilingual incantations. In these texts, Ekur is the haunt of demons, but there is no proof that Ekur is a name for an underworld beneath the earth's surface. In Ludlul, an utukku-demon leaves Ekur when a number of disease-demons leave their homes for Babylon in order to infect Šubši-Mešre-Šakkan:

51. im-hul-li [iš-tu i-šid] šamê° i-zi-qa 52. [u]l-te i-rat erşetim^{tim} i-ši-ḥa ṭi-²-i 53. [†]su-ú¹-lu lem-nu it-ta-sa-a ap-su-uš-šú

²⁹ For the Gate of the Captives and captive gods, see pp. 356-57.

^{30 &#}x27;House of Darkness' (bit ett) CT 15 45:4 (Descent of Istar), AMT 88 2:3; Maqlu 20 183; (btt ekleti) I.KA 62 rev. 17 (Descent of Istar), Gilg VII iv 33; (é.kukku.ga = bit ekleti) Surpu 53 12-13; YOS 11 p. 20e. 'House of Death' (bit mūti) CT 18 30 rev. i 30, arali = bit mūti, (é.ug.,ga) W. G. Lambert, AfO 19 118 F 9. 'House of Dumuzi' (bit dumuzi) Aa VI/4 31 (MSL 14 441) = [arali]. 'House of Dust' (bit epri) Gilg. VII iv 40, 45, see Descent of Istar 11 (CT 15 45). Note also é da.rí 'eternal house' in S. Kramer, Fest. Sjøberg 306:67 (see p. 293).

- 51. An evil wind, [from the hor]izon has blown in.
- 52. [F]rom the surface of the underworld headache sprung up.
- 52. An evil cough has come forth from the Apsu.
- 54. [A relent]less [utukku-demon] departed from Ekur.
- 55. [A lamaštu-demon has desce] nded from the mountain.

Later, in Ludlul III, the *utukku*-demon leaves the body of Šubši-Mešre-Šakkan and returns to Ekur:

```
[uš-te]-rid ap-su-uš-šú šu-ú-lu lem-[nu]
u-tuk'-ku la ni-²i ú-tir é-kur-ri-[iš]
```

BWI. 52:6-7

[He sent d]own Apsu-ward the evil cough. The relentless *utukku*-demon he returned [to] Ekur.

In *Ludlul*, it is unlikely that Ekur is an underworld beneath the earth's surface, since the *utukku*-demon neither ascends nor descends between Ekur and Babylon. In contrast, the 'evil cough' descends from Babylon to the Apsu in BWL 52:6.

Examples of Ekur in bilingual incantations also fail to identify Ekur as an underworld beneath the earth's surface. In these incantations the cosmic Ekur is identified with Enlil's temple Ekur in Nippur. In the opening lines of a Sagigameš incantation, headache leaves Ekur (CT 17 25:1-4). Here Ekur is identified as the "House of Enlil." In Utukku-Lemnutu III (CT 16 1:23-27), disease-demons leaving é.a é.kur = $b\bar{t}t$ ekur 'the Temple Ekur' are identified as messengers of Enlil. In a second Sagigameš incantation (J. Prosecky, ArOr 47 51:37-38) demons leave èš é.kur = $b\bar{t}t$ ekur for the land (kalam = $m\bar{a}tu$). In all three incantations, as in Ludlul II 54, forms of the verb è = $as\hat{u}$ 'to leave' describe the movement of the demons from Ekur to the earth's surface, rather than $e_{11} = el\hat{u}$ 'to go up', as might be expected if Ekur was an underworld beneath the earth's surface.

Geographic Terms

In addition to names for earth such as ki, *erṣetu*, and *qaqqaru*, a number of geographic terms refer to vast expanses of the earth's surface and perhaps even

 $^{^{31}}$ CT 17 25:1-4 nam.ta. 61 = it-ta-sa-a; CT 16 1:25 è.a.meš = it-ta-su-ni; J. Prosecky, ArOr 47 51:37-38 è.a.ne.ne.ke, = a-si-siun[u] (see ArOr 47 53 Variants nos. 17-18). Ekur is also accepted as name for the underworld in Jensen Kosmologie 185-95, and K. Tallqvist, StOr 5/4 25-32. CAD E 70, however, translates "(a locality where demons live)."

the entire land portion of earth. These include 'the land' (kalam, kur, ma.da, mātu), 'the lands' (kur.kur, mātātu), 'the four quadrants' (an.ub.da.límmu.ba, ub.da.límmu.ba, kibrāt arba'i, kibrātu), dadmū, adnātu, and nābalu 'dry land'. A number of these terms are listed together in Malku I 187–93:32

187. ir-bu-u = kib-ra-a-tú 188. ir-bu-u kib-ra-a-tum = kib-rat ár-ba-²i 189. ad-na-tum = ma-a-tum 190. un-na-tum = MIN 191. da-ad-mu = ma-ta-a-ti 193. da-ad-mu = a-tum

A. Kilmer, JAOS 83 428

'The Land' kalam, kur, ma.da, mātu

Akkadian mātu, like the English word 'land', has a wide range of meanings. Among these are 'dry land' (as opposed to seas), 'flat plain', 'country' in a political sense, and 'homeland'. In its broadest sense, mātu can refer to all dry land areas on the earth's surface. For example, the worldwide empire of Sargon is said to occupy māt siḥip šamê 'the land under heaven' in Sargon Geography 31, and Etana reports that he sees mātu 'land' and tāmtu 'sea' when he gazes down at the earth's surface during his flight to the heavens (see pp. 60–65). No comparable unilingual Sumerian examples of kalam, kur, or ma.da are known. However, two bilingual texts may preserve passages where kalam refers to at least the continental portion of the earth's surface. In Utukku-Lemnutu V, kalam.dagal.la = mātu rapāštu 'vast land' parallels an.dagal.la = šāmū rapšūtu 'vast heavens' (CT 16 13 iii 13–16). In a bilingual literary letter, kalam extends from sunrise to sunset:

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mu.mah lugal.mu sig igi.nim.ma
šu-ma-am şi-rum ša be-lí-ia iš-tu ma-tim e-li-tim a-di! (ma-tim
ša-ap-li-tim)

dutu.è.ta utu.šú.uš zà.šè kalam.til.la.a
mi.ni.in.túm.túm.ma
iš-tu (ṣil šamši adi) ereb šamši (DIŠ.UŠ) ana pa-ṭe₄ gi-mi-ir-ti
ma-tim i-gam(text DAM!)-mi-ra

PBS 10/4 8:6'-7' (WO 5 2:7-8)
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³² For ma.da, kur, and kalam, see H. Limet, RA 72 1-12. The equivalence of a number of these geographic terms is demonstrated by the bilingual Akkadian-Aramaic Tell-Fekherye inscription, where Aramaic mt is translated by Akkadian dadmū, kibrūtu, and mātu (see J. Greenfield and A. Shaffer, Iraq 45 110).